



#### ABSTRACT

The Transnational State of the Art Gap Analysis Report was developed through the compilation of 8 national reports and one EU report and it contributes to the implementation of the EntrInno project outcomes.

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### Definition of digital games

An attempt to define digital games encounters major difficulties arising from the multiplicity of types of games, their forms or the purpose for which they were written. Using the simplest formulas, it can specify that a digital game is “a game that employs electronics to create an interactive system with which a player can play” (wikipedia en, electronic game). Following this path, it can also indicate that in these games, there is a "certain type of software, that is part of the so-called “new media”, which in addition to audio-visual layer is enriched with a special interaction between the player and the application, which is called “gameplay” (<https://m.ppe.pl>).

Digital games can also be defined generally as computer programs, or sets of commands understood and executed by a processor (Skrzypczak, 1999). The author also points out that these programs are entertaining, educational and are a kind of interactive entertainment or fun supported by a computer system. "Due to certain criteria (time, theme, required skills, point from which you watch the action) of digital games, we can distinguish the following types: the game labyrinth, platform games, fighting games, action games, sports games, car games, shootouts, simulators, logic games, economic games, adventure games, role-playing games, educational games, and strategy games. The boundaries of the divisions are fluid, many games combine the features of many different types" (Skrzypczak 1999 [in:] Huk, 2011). According to M. Listner (2009) "computer games are kind of play simulators which from the real space were transferred into the virtual space. Simulation processes here are very important, because they create a reality that is structured and determined mathematically. Experiencing cyberspace by a player is not only about its exploration, but also in the implementing and creating the world of game in the semiotic and cybernetic cycle".

S. Łukasz (1998) defines digital games as "a computer program stored on any digital medium that allows making changes in graphics, or text displayed on the screen." The same author adds that "the term digital games can also be taken literally, meaning games for which you need a computer, or computer games, as a kind of entertainment, to run and control which you need a computer".

In the group of digital games there are also educational games, which used to be defined as "the games explicitly designed with educational purposes, or which have incidental or secondary educational value. All types of games may be used in an educational environment" (wikipedia en, educational game). An educational game usually is designed in such a way that it stimulates the development of the player, in order to broaden his/her knowledge or skills. In the case of educational

games, an educational objective is the one that prevails. These types of games are increasingly being used as educational tools, but they also provide much entertainment. By providing pleasant sensations they activate the limbic system, which stimulates the brain to work and develop. As emphasized by researchers (Franken, 2005 [in:] wikipedia en, educational game), pleasure teaches us to distinguish between what is good and beneficial for us; stimulating learning processes at the same time (wikipedia en, educational game). It is pointed out that educational games can be divided into two categories, depending on the objectives. The first consists of training games that stimulate brain development by performing specific operations such as movement, concentration, memory usage or logical thinking. The second category is informative games in which the players, based on their existing knowledge, may expand their resources in a particular topic.

The use of digital games in education is also linked to the emergence of the trend in creating the games called "Game-Based Learning (GBL)", where the game is defined as: "a type of game play that has defined learning outcomes. Generally, game-based learning is designed to balance subject matter with gameplay and the ability of the player to retain, and apply said subject matter to the real world" (wikipedia en, educational game).

### [Pedagogical Models for Fostering Entrepreneurial Spirit/Skills](#)

When we use and create pedagogical models and theories, we attempt to provide explanations of how people learn and provide best practices related to the pedagogical perspective of an approach. A number of learning approaches exist that help us to understand how people learn. As learning does not only happen within the formal space of a school classroom, but also in non-formal and informal contexts, as well as throughout peoples' lifetimes, there are respective pedagogical models that help us create appropriate instruction and guidance for learning.

The following learning models and theories can be very useful for the design and development of learning that aims at fostering entrepreneurial skills. Specifically, understanding how people learn is significant for defining the designs for the purposes of this project, based on the learning needs.

### [Andragogy – The theory for Adult Learning](#)

Even though learning and instruction are based on particular assumptions and principles, adult learning (andragogy) has important differences from young people learning (pedagogy). The term "andragogy" combines the meaning of two words; man ("andras" in Greek) and learning ("agogi" in Greek). In contrast to pedagogy, andragogy views the learner as an independent individual, able to take responsibility of his/her own learning and also conduct self-evaluation. The learner's role is to bring personal experiences and resources to share in a course; which adds to the richness of a learning course. Adult learners can identify their own learning gaps and express the need for becoming more

effective in their own practices. They can easily adapt to new learning situations and re-appropriate knowledge to solve new problems. Adult learners are oriented towards active learning; they prefer to act upon situations, solve problems, and relate content to their own experiences, needs and lives. According to Knowles (1984), who coined the term andragogy, there are five particular characteristics of adult learners (see Figure 3).

1. **Self-concept:** Adult learners are independent and can direct themselves to the types of learning they think is necessary for their needs.
2. **Experience:** As people grow up, they gain experiences. Adult learners join learning having their prior experiences as a point of reference and they are able to relate learning with those experiences. They can also enrich the learning course with their experiences, through the different examples and elaborations they provide.
3. **Readiness to learn:** Adult learners are a more mature learning audience. Hence, they are ready to learn and transfer that knowledge to their own context.
4. **Orientation to learning:** Adult learners prefer knowledge that is directly applied to their interests. In contrast to early learners, adult learners prefer to be able to immediately apply knowledge to existing problems. Therefore, their orientation to learning is problem-centred and directly applicable.
5. **Motivation to learn:** Motivation for learning is genuine for adult learners. They enter a learning experience, e.g. a course, because they are internally motivated and interested in the subject, in contrast to young learners who usually need external motivators as well.



Figure 1 Characteristics of adult learners based on andragogy.



Based on the above assumptions, Knowless (1984) and others like Kearsley (2010) have identified particular principles for the design and delivery of instruction:

1. It is important to involve adult learners in the planning and evaluation process
2. Adult learners' experiences are core in a learning course
3. Adult learners prefer to build knowledge with content that is directly relevant to their personal and professional experiences
4. The nature of adult learning needs to be evolving around problem solving, rather than around learning general content.

Therefore, learning needs to be as dynamic and interactive as possible, and designed around experiences that adult learners can relate to, can add to, and can provide solutions to. Problem – oriented instruction enables adult learners to participate more actively in a course and bring their own experiences to share and analyse.

### Experiential learning

Experiential learning involves actual experiences throughout a learning course. Specifically, learners can apply knowledge and information on actual situations (real or simulated) that are relevant to a subject. Experiential learning escapes the strict settings of a classroom and can be adequately applied through non-formal and informal instructional practices.

One of the benefits of involving experiential learning in a course is that learning is based on concrete experiences (Kolb et al. 2001), through which individuals make observation, form assumptions and test them in order to draw conclusions. Kolb has developed an experiential learning cycle. Within the cycles, the learner starts with existing experiences on which they are required to reflect and draw conclusions, which will define their next actions.

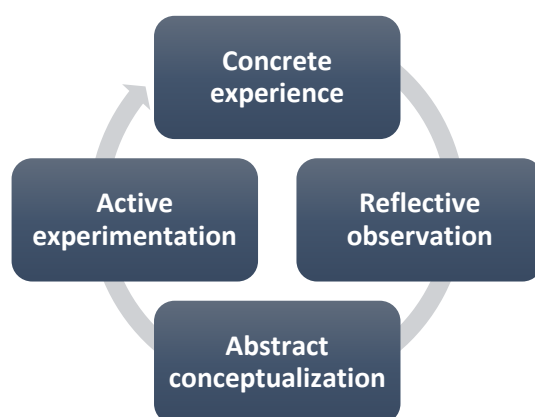


Figure 2 Kolb's Cycle of Experiential Learning

Through the particular learning cycle, learners are able to reflect on what they experienced in the learning course, conceptualize the impact, draw conclusions, and define what they would do differently next time (in the next cycle of experimentation) so that they can confirm or revise their conclusions.

The models described in this section are particularly helpful in informing the designs for the EntrInno project. Positioning the learners as active participants, in problem-solving situations, through which they need to experiment and reflect upon the consequences of their actions will be crucial in establishing a quality online game that will enhance the skills described in this project.

## The educational potential of games

According to Nesta (2013) research, games are a well explored tool for learning. Games can be used to open up new perspectives in learning in an innovative way and can motivate students and pupils to learn. Digital games are also significantly important for the creative industry for the UK. Digital games have an increased accessibility today. As technologies have advanced, educational games can be accessed and played from any device anywhere.

The learning process in entrepreneurship education is different from the normal classroom teaching. It is a more flexible, more active and experienced-based approach (Gibb, 1987). Research has suggested that the traditional education methodologies that put theory in the centre is unsuitable in the teaching for entrepreneurship. (Davies, 1991) Moreover, research also mentions that entrepreneurial skills are almost impossible to be taught via traditional teaching ways. Young (1997)

Literature shows that a more flexible approach is needed to educate entrepreneurship to young people. This approach must involve energy, excitement and the incorporation of action and experiential-learning. (Tasnin et al., 2013) A reflective teaching method i.e. lectures, handouts, required reading, programmed instructions and content-oriented examinations are ineffective for entrepreneurship education because these methods ignore the complexities of the entrepreneurial environment. (Garavan, 1994) Literatures suggest that the use of non-traditional intervention such as games or interactive activities is valuable teaching tools for entrepreneurs.

As Tasnim and Yahya (2013) stated; literature indicates that the uses of non-traditional intervention, such as games or interactive activities are valuable teaching methods. They also related to the fact that these interactive teaching methods encourage passive students to engage in learning more actively. Hake (1998) conducted research analysing student performance with interactive engagement and traditional lecture methods. He found out that those students who used activities during the

classroom demonstrated more advanced problem solving skills. This kind of teaching supports the development of social competence and problem solving skills. While playing games, students have the opportunities to practice applying the materials presented in a classroom and using that information to solve a problem met outside of the school.

Bill Gates (2005) stated the following: “Training the workforce of tomorrow with the high schools of today is like trying to teach kids about today’s computers on a 50-year-old mainframe. It’s the wrong tool for the times.”

McClarty et al. (2012) indicated that game-based learning in higher education teaches and reinforces skills important for future jobs such as collaboration, problem-solving, and communication for students. They also added that an attractive element of the gaming experience is that it provides opportunities for continued practice because negative experience is not associated with failure; in fact failure serves as an integral part of the learning experience. This encourages players to practice, get better and replay the part of the game where they failed. Moreover, games that give immediate constructive feedback allow players to change their game play in order to enhance their performance.

A yearlong pan-European study consisting of 500 teachers found that the majority of teachers agreed with the following statement: “motivation is significantly greater when computer games are integrated into the educational process” (Joyce et al. 2009).

An additional benefit of games in education is that it provides an environment for authentic and relevant assessment. It occurs through the evaluation of players’ actions that provides immediate feedback for players. (Ash, 2011)

As Tasnim and Yahya (2013) reported, apart from the potential benefits of games for memory, performance, social competence and transfer of learning, there are intense debates about using them as a teaching tool. Opposition states that games are time consuming for students as well as teachers, in particular due to the process of familiarisation with the game.

As McClarty et al. (2012) stated, there is limited research on the relationship between learning within digital games and academic performance so it cannot be clearly reported that games are the most effective tool for all content and in all situations. However, as the findings of various research suggested; digital games in education encourage motivation, engagement, adaptivity, simulation, problem solving and collaboration. Measuring these skills with academic performance might not give relevant results because there are intangible benefits of digital games in education.

## Opportunities in Digital Games in Education

It is widely accepted nowadays that many of today's students will pursue jobs that do not currently exist and that digital literacy and understanding of how systems (computers and otherwise) work will become increasingly important. In addition, tomorrow's workers will most likely change jobs many times throughout their careers and these jobs will certainly require some mastery of digital media and technology.<sup>1</sup> Can we argue that digital games could help students develop the technology skills they need to succeed in their future jobs? Scot Osterweil, a research director in Massachusetts Institute of Technology's Comparative Media Studies programme and creative director of the school's Education Arcade initiative to explore how games can be used to promote learning, argues that video games can do it all in terms of education. Games though, he added, are a powerful learning tool only when combined with other exploratory, hands-on activities and ongoing instruction from a teacher acting more as a coach than a lecturer.<sup>2</sup> Alan Gershenfeld a Founding Industry Fellow at Arizona's State University's Center for Games and Impact supports that video games if well executed can provide a strong framework for inquiry and project based learning and are uniquely suited to fostering the skills necessary for navigating a complex, interconnected, and rapidly changing 21<sup>st</sup> century.<sup>3</sup> Below we will briefly present five factors that indicate that digital games could offer new opportunities in education.<sup>4</sup>

### Games are Built on Sound Learning Principles

In the educational process it is often said that repetition is the mother of learning. Well then digital games as a learning tool provide opportunities for continued practice due to the fact that negative consequences are not associated with failure. In fact, quite the opposite happens as failure serves as an integral part of the learning experience.<sup>5</sup> Digital games also enjoy the advantage of immediate feedback which will enable students to improve their work when given constructive feedback.

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<sup>1</sup> In Elena Malykhina "Fact or Fiction: Video Games Are the Future of Education" Scientific American, September 2014.

<sup>2</sup> As above (12) p.2

<sup>3</sup> As above (12) p.3

<sup>4</sup> The factors presented here are from Katie Larsen McClarty, Aline Orr, Peter M. Frey, Robert P. Dolan, Victoria Vassileva and Aaron McVay "A Literature Review of Gaming in Education" Pearson Research Report, June 2012.

<sup>5</sup> Gee J.P. "Deep learning properties of good digital games: How far can they go?" in Ritterfeld U. Cody M. and Vorderer P. (eds.) "Serious Games: Mechanisms and Effects" pp.67-82, Routledge New York.



## Games Provide Personalised Learning Opportunities

Personalised learning according to OECD is that schools (and educational institutions we would add) tailor education so that each student achieves the highest possible standard. Three processes at least are required: knowing the strengths and weaknesses of students, developing teaching and learning strategies that meet student's needs and engaging curriculum choices.<sup>6</sup> Accordingly each student during a game could receive a picture of their competences based on their game actions, and games could be adapted further according to student needs.

## Games Engage the Learner More

Games according to Csikszentmihalyi contain the pieces necessary to engage students and help them enter a state of flow where they are: fully immersed in their learning environment, energised, and focused on the activity they are involved in.<sup>7</sup> At the same time games ensure the constant motivation of the players simply because they feel an attachment to the goal.

## Games Teach 21st Century Skills

Squire mentions that games are frequently cited as important mechanisms for teaching 21<sup>st</sup> century skills due to that fact that they can accommodate various learning styles within a complex decision making context.<sup>8</sup> To this end there is an increased awareness that teaching and assessing 21<sup>st</sup> century skills according to Rupp "frequently requires exposing learners to well-designed complex tasks, affording them the ability to interact with other learners and trained professionals, and providing them with appropriate diagnostic feedback that is seamlessly integrated into the learning experience."<sup>9</sup> This is what well-designed games do.

## Games Provide an Environment for Authentic and Relevant Assessment

By definitions games are inherently assessments. After the game ends the player receives detailed feedback on his/her performance. There is a case by Millis, Forsyth, Butler, Wallace, Graesser and Halpern who developed a game-based intelligent tutoring system designed to teach scientific inquiry skills to high school and college students. Students engage in natural language "dialogs"

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<sup>6</sup> Organization for Economic Cooperation and Development (OECD) "*Personalizing Education*" Executive Summary available at <http://www.oecd.org/edu/school/36509488.pdf> accessed on 13/01/2016 at 16:15.

<sup>7</sup> Csikszentmihalyi M. "Flow-The Psychology of optimal experience" Harper Perennial 1990, quoted in Katie Larsen McClarty, Aline Orr, Peter M. Frey, Robert P. Dolan, Victoria Vassileva and Aaron McVay "*A Literature Review of Gaming in Education*" Pearson Research Report, June 2012.

<sup>8</sup> Squire K.D. "*From Content to Context: Video Games and designed experiences*" *Educational Researcher* Vol.35 No.8 pp.19-29 quoted in Katie Larsen McClarty, Aline Orr, Peter M. Frey, Robert P. Dolan, Victoria Vassileva and Aaron McVay "*A Literature Review of Gaming in Education*" Pearson Research Report, June 2012.

<sup>9</sup> Rupp A. Andre, Gushta Matthew, Mislavy Robert J. and Williamson Shaffer David "*Evidence-centered Design of Epistemic Games: Measurement Principles for Complex Learning Environments*" *The Journal of Technology, Learning and Assessment* Vol.8 No.4 2010 pp.1-48.

with artificial intelligence agents and are continually evaluated on their application of higher-order thinking skills as demonstrated by their responses to the agents.<sup>10</sup>

### The overall findings

The overall assumption that can be drawn from the above is that digital games can support and facilitate learning. Since they have not yet been widely introduced in education they would need to be tested against the currently used teaching and learning methods and approaches.

### Threats of digital games

Learning or teaching by the use of gaming can cause various threats:

- Inappropriate behaviours such as cyber bullying
- Risks of privacy and security
- An unsuitable pedagogical climate

That's why it is needed to establish an appropriate and safe in-game educational environment for successful entrepreneurship learning.

Definitely one of the most common threats of digital games is related with piracy or cyber-attacks. These threats can cause problems not only for game players but also for game developers. José Manuel Mercado states<sup>13</sup>: *"when operating smoothly, online services are invisible and largely taken for granted by the user, but the moment even a hint of non-performance enters the frame, the consumer backlash can be costly"*.

Inappropriate behaviours online that might also occur in-game surrounding learning are ones that show various forms of aggression:

- Exclusion: Intentionally and cruelly excluding someone from an online group.
- Flaming: on line fights using electronic messages with angry and vulgar language
- Harassment: repeatedly sending nasty, mean and insulting messages.
- Denigration: posting gossip or rumours to damage one person's reputation or friendships.
- Cyber stalking: repeated, intense harassment and denigration that includes threats or creates significant fear.
- Outing: sharing one's secrets or embarrassing info or images online
- Impersonation: pretending to be someone else sending material to get that person into trouble (identity theft)

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<sup>10</sup> Millis K., Forsyth C., Butler H., Wallace P., Graesser A.C., & Halpern D. "Operation ARIES! A Serious game for teaching scientific inquiry" quoted in Katie Larsen McClarty, Aline Orr, Peter M. Frey, Robert P. Dolan, Victoria Vassileva and Aaron McVay "A Literature Review of Gaming in Education" Pearson Research Report, June 2012.

- Trickery: Tricking someone into revealing secrets, then sharing it online

One of the threats that are related with digital games and gaming in general is sexism. Rachel Kowert and Johannes Breuer authors of “Sexist Games=Sexist Gamers?”<sup>14</sup> believe that a main negative effect of a sexist gaming culture is exclusion and they see it occurring on four levels: the games industry and its workforce, the content of the games, socialization processes in childhood and adolescence, and the gaming community itself. Authors claim that some people are afraid of the diversification of the gaming community, that some are afraid that they will lose something if others have the same rights as they do. Even though it is seen that the number of players across genders is becoming more even; authors claim that *“sexism in gaming cultures will most likely not dissipate until gaming is understood and treated as an activity that can be enjoyed by anybody and this change needs to begin with the way we introduce technology to our children, as video games and video game play are largely seen as a gendered (i.e., exclusively male) activity”*.

Sexism in gaming is an important topic and there is a movement that surfaced a year after the "Gamergate" affair, which involved a spate of threats and harassment of those criticizing the way women are depicted in video games. There was a plan to make two panel discussions, “SavePoint: A Discussion on the Gaming Community” and “Level Up: Overcoming Harassment in Games” at the March 2016 event in Austin, Texas, but it was cancelled after getting many threats as organisers claim<sup>16</sup>: “in the seven days since announcing these two sessions, SXSW has received numerous threats of on-site violence related to this programming”. A similar incident occurred with female games developer, Brianna Wu;- developer of sci-fi action puzzler Revolution 60. She has been threatened to be raped by anonymous persons because of her outspoken support of women in tech and gaming<sup>17</sup>.

There is an online course about defending games from hacker attacks, where authors<sup>15</sup> of this course claim, that sometimes hackers try to steal game code even before the release of the game, so that they could get money from it: “given the large audiences of popular games, hackers seek to target game code, sometimes even before a title is released, to launch attacks for their own reward”. It shows that not only game players could be threatened by piracy, hacking or cyber-attacks, but also producers of digital games should put their attention to safety of the game.

While playing digital games, care must be taken with the management of personal data. Players might get the feeling that they have lost control of their personal data or that someone has stolen it to use illegally.

All these threats should be taken into account for having an appropriate entrepreneurship learning environment in digital game.

## Specific skills for social entrepreneurship

### Background

Increasingly in almost all industrialised countries, in the last decades we have seen the remarkable emergence of a new type of socio-economic model for business, the social enterprise. In the 1970s, with increased unemployment and falls in economic growth across most of European countries, many states experienced crisis. Retrenchment followed, which was often characterised by privatisation and a stark reduction in public spending on public services provision by governments.<sup>11</sup>

This situation gave rise, in western European countries, to an unprecedented increase in the development of social enterprises to help meet this inadequacy in social needs provision and rising unemployment. These enterprises were mainly established by civil society or third sector organisations and groupings almost in all European countries. They included a wide array of initiatives focused on such areas as childcare, employment programmes for the unemployed, care for elderly people and social information provision.

The extent and nature of how individual countries responded through third sector organisations to the emerging increased social need differed, dependent on the particular circumstances of individual states. There have been significant differences across countries in terms of the activities of social enterprises. For instance, there has been a marked predominance of social enterprise activity in health, social work and education in Hungary and Romania, while countries such as the UK and Sweden have seen a significant increase of social enterprises in areas such as community and social services. In Italy the main fields of activity are work integration and welfare service provision (EU Commission 2013 reports).

Given that, these enterprises were not established by either the public or private sectors, their source of emergence consequently bears a strong influence to their sectoral residence, i.e. the third sector also referred to as the social economy. In understanding the concept of social enterprises, it is therefore important to understand their sectoral context.

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<sup>11</sup> Mosher-Williams 2006; Borzaga and Defournay, 2001; Borzaga and Santuari, 2003





In the context of the EU the concept of the social economy is relatively new, and member states have come from different starting points and are at different stages of development in this context. According to the European Economic and Social Committee, social economy enterprises represent 10% of all European businesses, with two million undertakings and 6% of EU's employment, (EESC 2013).

This growth is not confined to Europe but is reflected across the globe as exemplified by data on worldwide co-operatives (Euricse and the International Cooperative Alliance, 2012). These developments demonstrate that the Social Economy has become a key element of the European social model and a key player in attaining the objectives set out in the EU 2020 Strategy. Therefore, the dimension of the social economy is of significant value for Europe in striving to combat poverty, increase social inclusion and impact positively on employment rates.<sup>12</sup>

Demonstrating its growing policy relevance, the EU Commission (2013) has recently issued a comprehensive guide to the social economy and social entrepreneurship. The guide outlines the context in which the social economy and social entrepreneurship are situated. It defines the characteristics of organisations within the social economy, new forms of organisations and new emerging legal forms to accommodate these. It goes on to provide an exposition of new data, explaining the scale and scope of activities within the sector and the impact of the present economic situation.

Significant changes in organisational behaviour relating to finance, economic activity, social impacts and corporate responsibility are explored along with key challenges for the sector, the role of public policy and the outlook for the social economy. Essentially, what emerges here is that **social enterprises operating within the social economy occupy a place in member state economies that is distinct from the more traditional private and public sectors and is extremely important in the European context.**

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<sup>12</sup> University of Plymouth – “S-Cube Project (S3): Training Soft Skills In Social Enterprises Using Virtual Environments for Role Play”

### The European Commission Definition

*"A social enterprise is an operator in the social economy whose main objective is to have a social impact rather than make a profit for their owners or shareholders. It operates by providing goods and services for the market in an entrepreneurial and innovative fashion and uses its profits primarily to achieve social objectives. It is managed in an open and responsible manner and, in particular, involves employees, consumers and stakeholders affected by its commercial activities".*

The Commission applies the term social enterprise to the following types of business:

- *"those for which the social or societal objective of the common good is the reason for the commercial activity, often in the form of a high level of social innovation,*
- *those where profits are mainly reinvested with a view to achieving this social objective*
- *and where the method of organisation or ownership system reflects their mission, using democratic or participatory principles or focusing on social justice."* (European Commission, 2011:2)

Figure 3 European Commission definition of social enterprise

### Social Entrepreneurship: A Tool for Social Change

As above explained, in the last decades the concept of 'social entrepreneurship' has been rapidly emerging in the private, public and non-profit sectors, and interest in social entrepreneurship continues to grow very fast.

Currently, the non-profit sector is facing intensifying demands for improved effectiveness and sustainability in light of diminishing funding from traditional sources and increased competition for these scarce resources. At the same time, the private sector is increasing the need to foster corporate social responsibility and more proactive responses to complex social problems, while governments at all levels are grappling with multiple demands on public funds.<sup>13</sup>

<sup>13</sup> Ref . Sherrill Johnson, Research Associate - Canadian Centre for Social Entrepreneurship, "Literature review on Social Entrepreneurship" November 2000

With its inner attitude to problem-solving and social innovation, social entrepreneurs blur the traditional boundaries between the public, private and non-profit sector, and develop/experiment hybrid models of for-profit and non-profit activities in a very wide range of sectors.

In fact, promoting collaboration between different fields is implicit within social entrepreneurship, as it aims to develop new approaches to solve old problems using often a strong intuitive appeal and attitude to create new and challenging models of management and processes.

As any *change-oriented activity*, social entrepreneurship has not evolved in a vacuum, rather within a complex framework of political, economic and social changes occurring at the global, national and local levels that make all existing models and experiences really different one from another.

What is relevant for the purpose of this paper is not to provide a wide literature and academic review on the topic, which would be rather a huge and ongoing process not suitable with the purpose of EntrInno project, but to focus on the specific SKILLS that project's partners identify as relevant and strategic to be pursued to define the profile of a successful "*social entrepreneur*".

All over Europe, with many differences from one country to another of course, there has been an exponential increase in social entrepreneurship classes at universities where they teach students how to create business plans for social ventures.

Much less evident and systematized are the training/learning pathways within the non-formal education sector, which is basically the core field of action of the EntrInno project.

What we try to focus on here is a proposal of key mindsets and skill sets that help make successful social entrepreneurs, basing on our experience and on a review of some educational proposals and in-depth studies of social innovators.

It is interesting to underline that in the academic literature while many definitions of social entrepreneurship emphasize the 'social' rather than the entrepreneurial nature of the activity (e.g., by focussing on non-profit organizations and their activities), much of the literature on social entrepreneurs emphasizes the 'entrepreneurial' characteristics of such individuals.

As regards the needed skills for social entrepreneurship, literature and experiences are equally various and very wide all over the world, especially when we talk about not-technical but transversal (the so called "soft") skills.

Soft skills, also commonly known as 'soft competencies' or 'people skills', are recognised as personal attributes or a cluster of personal traits that optimise, enable positivity and enhance people's interactions and relationships with each other.

They are in everyday use by most people, are at different levels of existence and are commonly regarded as a combination of competencies that contribute to better express how people know and manage themselves, as well as their relationships with others.

Soft skills are related to the interpersonal and intrapersonal areas. Consequently, there is a relational dimension involved.

Here below we propose a list of the **10 transversal/soft skills** that a "social entrepreneur" should acquire:

**1. Leadership** – the social entrepreneur takes initiative and action to solve problems, acting as "engine" to gather collaborators and stakeholders supporting the idea. He/she does not complain about what's wrong but works to proceed forward. He/she has a wide picture of context and is able to act within it.

**2. Creativity and innovation** – the social entrepreneur sees new possibilities and think in unconventional ways. He/she sees connections and patterns where few other people would imagine and works for it.

**3. Resilience** in the face of adversities -When things fall apart, the social entrepreneur rises to the occasion. He/she thrives in the most ferocious storms and considers failures as valuable feedback.

**4. Grit and motivation** - This is a combination of perseverance, passion, and hard work—the relentless drive to achieve goals, complete commitment to achieving the task.

**5. Social intelligence** – social entrepreneur is excellent at connecting with others and building strong relationships, taking into account not only his/her own concrete interests but also the community's, environmental constraints, ethic aspects of any decision, immediate and long term consequences of processes and decisions.

**6. Empathy** – the social entrepreneur is able to put him/herself in the shoes of others, and imagine perspectives other than his/her own; this is one of the most valuable qualities for understanding the needs of others whom he/she works for.



7. **Optimism** – the social entrepreneur is confident that they can achieve a bold vision, even when many other people doubt them. They have a strong sense of self-efficacy and a belief that they have the power to change their circumstances.

8. **Flexibility and attitude to mobility and changes** – the social entrepreneur is able to change their plans if needed, at short notice if necessary for the result, available to move and travel, and to find organizational solutions to face unforeseen circumstances.

9. **Continuous learning** - the social entrepreneur never considers themselves out of learning process. Due to the high level of innovation and “relationality” of the job and to the fact that it relates somehow to social dynamics, and not only economic ones, they must be ready to improve their skills and knowledge whenever needed.

10. **Visionary approach** - the social entrepreneur sees opportunities where others only see voids, unemployable people and unvalued resources. Courage and prompt thinking is what makes social entrepreneurs different from simply ‘good’ people.

Each one of these skills is something that young entrepreneurs can develop with practice rather than through a theoretical and formal learning (at school and/or university).

For a long time, people thought that these traits were fixed: you either had them or you didn't, people couldn't change. But now we know that people can develop these competencies, exactly in the same way that students can learn a foreign language, so too they learn the key skills for being social innovators and entrepreneurs becoming proficient in these core competencies.

These skills are, equally, to be considered complementary to those more technical related to business management and communication skills, which are to be considered the base of any (social) enterprise.

If social entrepreneurship is considered as principally bringing business and management skills to the non-profit sector, the skills of the entrepreneur are fairly replicable through traditional tools and curricula.

If a social entrepreneur is conceived as a creative and innovative ‘individual’ with great potential, replication will be much more difficult to achieve, and the focus should then be on creating conditions in which latent entrepreneurial talent can be harnessed for social purposes.

We think that both of these “models” of the social entrepreneur could exist in reality, and that an effective and productive training tool should take into account both these extreme profiles matching technical knowledge with relational and social competences.



In conclusion, we can wish and work in this direction: given the need for new approaches that social problem solving demands, social entrepreneurs emerge as a dynamic group with a viable and highly sustainable approach.

Yet because the concept of social entrepreneurship is relatively new, there are few institutional mechanisms in place to support this work in most of the European countries, even if in recent years it seems that something is changing and that, in policy terms, the relevance and priority of this topic seems to have been acquired within most of governments, in spite of the economic crisis.

### Entrepreneurship in European policy context

Promoting entrepreneurship in Europe has been one of the primary objectives of the EU agenda since the beginning of the last decade. The European Commission's Green Paper on "Entrepreneurship in Europe" in 2003 recognised that entrepreneurship is the key to competitiveness that accompanies efficiency and innovation. (EC, 2003) According to a Eurobarometer survey (2002), 45% in the EU and 67% in the US would consider self-employment over employment. The Green Paper stated that there is less entrepreneurial dynamism in Europe and therefore it is a great challenge for the EU to change the mindset of people and create an entrepreneurial climate within its Member States. The Entrepreneurship Action Plan adopted in 2004, highlighted the EU's commitment to boosting entrepreneurship in Europe since it is the major driver of innovation, competitiveness and growth. It said that in order to release the EU's full entrepreneurial potential, Europe must become an attractive place for entrepreneurs. It acknowledged that the EU needed entrepreneurship education that supports the creation of entrepreneurial mind-sets among young people. (EC, 2004) In 2006, the Commission's Communication 'Implementing the Community Lisbon Programme' stressed the importance of fostering entrepreneurial mind-sets through education and learning. It acknowledged that education in entrepreneurship increases the chance of start-ups and self-employment. Besides the growth in the number of start-ups, dynamic SME can also benefit from young people with entrepreneurial mind-set. (EC, 2006) The Education and Training 2010 Work Programme identified eight key competences for lifelong learning, personal fulfilment and development, active citizenship, social inclusion and employment. The Work Programme included "sense of initiative and entrepreneurship" as one of the key competences. (Official Journal of the European Union, 2006, pg. 17) In 2008, the COM put forward the **Small Business Act (SBA)** that aimed at unlocking the full potential of European SMEs. The Observatory of EU SMEs (2007) survey showed that in the US, firms on average increase their employment by 60% by their seventh year. This number is significantly lower among EU firms: 10% to 20%. The key to succeed in the field of entrepreneurship is to change the perception of the role of entrepreneurs and risk-taking in the EU and therefore entrepreneurship should be applauded by political leaders and the media and supported by administrations. Actions proposed in the SBA designed according to the "Think Small Principle" and included more focus on entrepreneurship education among young people and women. (EC, 2008) The objective of the EU Strategy for Youth adopted in 2009 was the development and the encouragement of talent, creative skills, entrepreneurial mind-set and cultural expression of young people. (EC, 2009) The EU 2020 Strategy recognised that the EU needed to promote entrepreneurship by supporting Young Innovative



Companies. (Flagship Initiative: **“Innovation Union”**) Through the flagship initiative: **“Youth on the move”** the Strategy explored ways of promoting entrepreneurship through mobility programmes for young professionals. It also promoted the recognition of non-formal and informal learning as a way of stimulating entrepreneurship education. Finally, the flagship initiative: **“An industrial policy for the globalisation era”** realized that the support of entrepreneurship is inevitable to guide and help industry to become fit to meet the new challenges presented after the economic crisis. Overall, in regards of entrepreneurship, the Europe 2020 Strategy was a call for the creation of a more favourable environment for entrepreneurs and the promotion of an entrepreneurial mind-set. In addition, it stated that entrepreneurship must be developed by certain policy initiatives, for instance the simplification of company law or initiatives that allow entrepreneurs to restart after failing business. (EC, 2010) In addition, the facilitation of entrepreneurial mind-sets, greater availability of start-up support services and microfinance, as well as schemes converting unemployment benefits into start-up grants were some of the priorities of COM 2012 Communication **“Towards a job rich recovery”**. (EC, 2012a) Entrepreneurship 2020 Action Plan recognised that **“To bring Europe back to growth and higher levels of employment, Europe needs more entrepreneurs.”** The Action Plan documented that entrepreneurship makes the European economy more competitive and innovative. In Europe, new companies (particularly SMEs) represent the most important source of employment, they create 4 million jobs each year, according to the COM calculation (2009). The Plan suggested several actions, which were grouped under three pillars, would help unleash Europe’s entrepreneurial potential: 1.) Entrepreneurial education and training to support growth and business creation, 2.) Strengthening framework conditions for entrepreneurs by removing existing structural barriers and supporting them in crucial phases of the business lifecycle and 3.) Dynamising the culture of entrepreneurship in Europe: nurturing the new generation of entrepreneurs. (EC, 2013) Along with the Entrepreneurship 2020 Action Plan, the COM proposed the Youth Entrepreneurship Strategies (YES), which aims at bringing wider understanding of **“entrepreneurship education”**. It focuses on creating an education system where attitudes, soft as well as hard skills of young people can be developed such as creativity, responsibility, risk-taking, problem-solving, team-working and relevant business competencies. YES intends to span entrepreneurship education and integrate it across the full education cycle, starting from primary through secondary school to higher education. To achieve that, its objective is to develop valuable links between educational institutions and enterprises. (Moroney, 2013)



## Entrepreneurship in the EU

As it could be seen from the previous chapter, the EU has been focusing on fostering and stimulating entrepreneurship and making Europe an attractive place for businesses and entrepreneurs. The European Social Fund is the major source that has been working to support entrepreneurs on the continent. As the European policies have revealed, entrepreneurship has economical and social benefits because it drives force for job creation, competitiveness and growth and at the same time it also contributes to personal fulfilment and the achievement of social objectives.

Directorate-General (DG) for Internal Market, Industry, Entrepreneurship and SMEs is the COM service responsible for fostering entrepreneurship and growth by reducing the administrative burden on small businesses and implementing the actions described in SBA.<sup>14</sup> The DG has also been studying the entrepreneurship in EU Member States for over a decade. The latest survey was carried out by TNS Opinion & Social network in all MSs and some non-EU MSs and was entitled “Entrepreneurship and in the EU and beyond” (Eurobarometer, 2012). In this section the major findings of the survey are introduced.

58% of the EU respondent would rather choose to be an employee over self-employed and only 37% would consider self-employment as a career prospect. This numbers indicate that self-employment had become less attractive to EU citizens comparing it to the results of the Eurobarometer 2009 when 45% chose self-employment as career prospect. It is important to note, that generally, self-employment was more attractive in non-EU countries such as Turkey (82%) or Brazil (63%). 30% of EU respondents who were not self-employed regarded self-employment as a feasible career option. the vast majority (68%) thought that self-employment is not possible within 5 years. “Not enough capital” and “the current economic climate is not good for start-ups” were the two most popular responses when citizens were asked about why self-employment is not feasible for them. The survey also revealed information about the desirability of self-employment and shed light on the depressing fact: only 1/3 (32%) of the EU respondents said that self-employment was desirable for them. Moreover, 23 % of the respondents indicated that they had already started a business, taken over one or were taking steps to start one. The biggest fear to run a business among EU respondents were the possibility of going bankrupt (43%) and the risk of losing property /home (37%).

The survey also focused on the perception of entrepreneurs within the EU. The majority of respondents agreed that entrepreneurs are job creators (87%) and entrepreneurs create new products and services that benefit all of us (79%). Smaller majorities agreed on the following statements: entrepreneurs take advantage of other people’s work (57%) and that entrepreneurs only

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<sup>14</sup> <http://ec.europa.eu/growth/about-us/>



think about their own pockets (52%). To sum up, only a little over half of EU respondents (57%) said that they had a broadly favourable opinion about entrepreneurs. This suggests that there is scope for a project such as Entrinno to raise the understanding of entrepreneurship as something which can also be a force for good, for example the profiling social enterprise as part of the game to be developed.

In addition, as it was highlighted in the European policy context part, the EU has been trying to foster entrepreneurship education in formal and non-formal learning. However, there were only 23% of the respondents said that they had taken part in a course or activity about entrepreneurship. The result is somewhat better in Finland with 39% but it is really disappointing in England with 15%. The survey shed light on a fact that only 28% of the EU respondents agreed that their school education made them interested in becoming entrepreneur. Personal independence and self-fulfilment are the most popular reasons for wanting to become self-employed in the EU according to Eurobarometer (2012).

With regard to the entrepreneurs in the EU, the survey (Eurobarometer, 2012) found out that almost half of the respondents started their business because s/he came across the opportunity, 29% started out of necessity and 17% said because that was an opportunity to take over a family business.

Lazear (2005) determined several definitions about entrepreneurs. In effect, entrepreneurs are those who can state the following: "I am among those who initially established the business." Another concept of entrepreneurs can be the CEO who "reinvents" the company. Lazaer (2005) said that the definition is conceptually distinct from "self-employed" because self-employed people do not need the combinations of skills that are necessary for real entrepreneurship are less important for. However, it is important to note that at the empirical level, self-employed individuals are entrepreneurs if they view themselves as having started a business. According to the definition of OECD (OECD, 2001, pg. 22) entrepreneurship is used synonymously with self-employment and an entrepreneur is anyone who works for himself or herself but not for anyone else, except under arm's-length contracts or their conceptual equivalent.

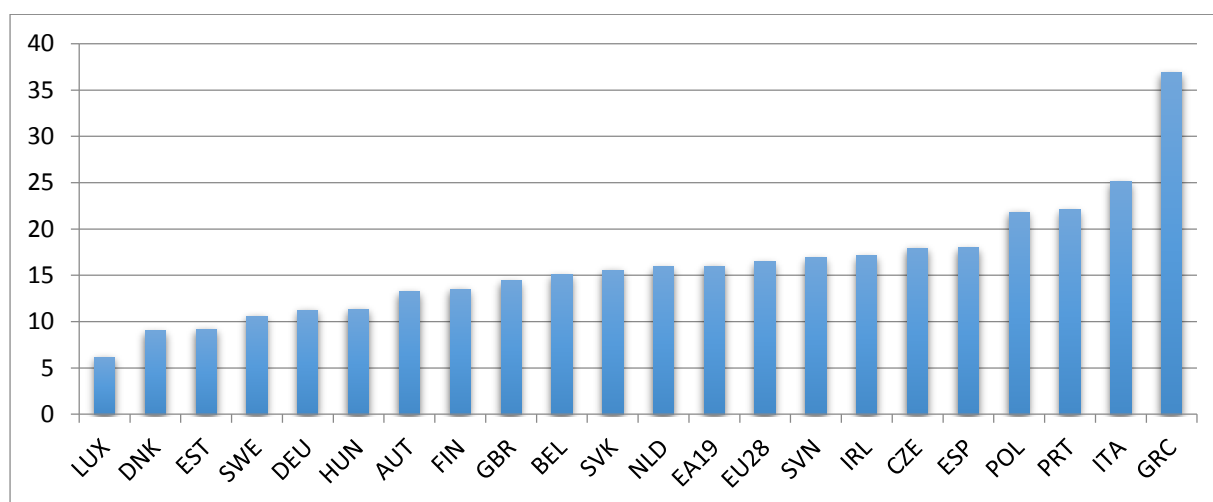


Figure 4 Self-employment rate of total % of employment, 2013, Source: OECD (2015) Labour Force Statistics, Author's own work

Figure 4 demonstrates the self-employment rate of the total employment rate in the EU in 2013 based on the statistics retrieved from OECD. As it is already evident from the bar chart, Greece (36.8%) had significantly higher self-employment rate than any of the other EU countries. Comparing this rate to the global level, Greece's self-employment rate is higher than Brazil's (31.2%) and Turkey (35.2%). Generally, it can be seen that countries from south Europe such as Italy, Portugal or Spain performed much better in regards of the self-employment rate than the Western European countries like, Luxembourg, Denmark or Austria. The reasons could be found in the GEM report (2014) because it revealed information about the motivation of early-stage entrepreneurs in the EU countries. It is a general trend that countries with higher unemployment rate tend to have higher rate of necessity driven entrepreneurs. According to the definition of the GEM Report (2014, pg. 24.) necessity-driven entrepreneurs are those who "have no better choice for work". For instance the necessity driven entrepreneurs takes up 34% of all entrepreneurs in Greece while in Austria 11% of all entrepreneurs started a business out of necessity.

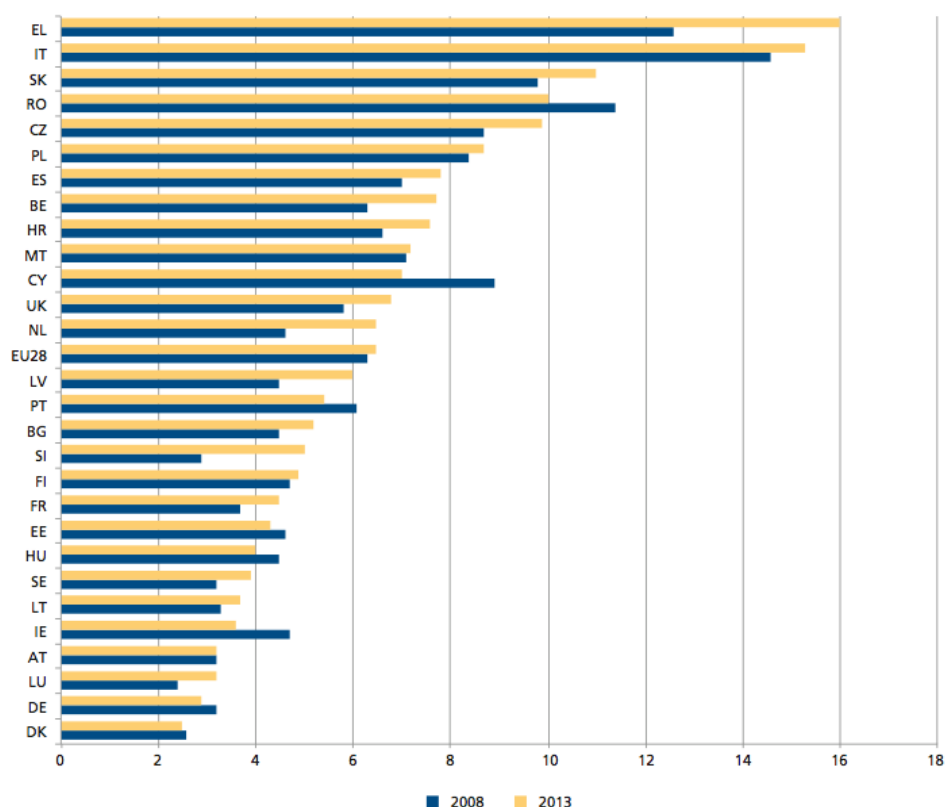


Figure 5 % of self-employed in relation to total employment (15-29 age group), by EU MS, 2008-2013 Source: Eurofound (2015, pg. 12)

According to Eurostat (in Eurofound, 2015), there were 6.67 million people between 15 and 29 who were self-employed in 2013. Comparing this data to the total number of young European population, it means that only 6.5% of the total young population engaged in self-employment. Like in Figure 4, a similar trend can be identified in Figure 5 that shows information about young people self-employment in the EU. Greece and Italy are on top of the table followed by mainly Eastern European countries. At the bottom of the table, countries like Denmark, Germany or Austria can be found. Figure 5 also reveals information about the young self-employment rate in 2008. As it can be seen, this rate slightly increased from 6.3% to 6.5%. This increase could be linked to the rise of the entrepreneurial activity in some Southern and Eastern European countries.



## Entrepreneurship Education in the EU

Europe's future depends on the innovative, well-educated and entrepreneurial citizens who have the spirit and inquisitiveness to take on their own businesses. A dynamic economy that promotes entrepreneurship is needed in Europe. Education is a crucial element to shape young people's attitude, develop their skills and culture that it is vital for entrepreneurship. Therefore, entrepreneurship education should be addressed from as early age as possible. It does not only shape the mindsets of young people but also provide the set of skills that are beneficial at other part of the life. (EACEA, 2012)

The Lithuanian national strategy was the first one in Europe that mentioned entrepreneurship education in 2003. It was followed by Wales and Norway in 2004. The other European countries launched entrepreneurship education strategies from 2007 and particularly in 2009. Entrepreneurship education is being promoted in most of the Member States across Europe focusing on the integration of entrepreneurship education. (EACEA, 2012)

Rethinking Europe was set up in 2012 in order to reform education system across Europe in order to respond to the demand for high skilled workforce and reduce employment. One of the areas that this initiative focuses on is the promotion of entrepreneurial skills. According to the initiative, Member States should foster entrepreneurial skills through new and creative ways of teaching and learning from primary school onwards. It stated that all young people should benefit from at least one practical entrepreneurial experience before leaving compulsory education. (EC, 2012b)

## United Kingdom

### State of the Art Report in the UK

According to the office for National Statistics (2014), there were 4.6 million people who had self-employment as their main jobs and an additional 356,000 employees who had a second job in which they were self-employed. The self-employment is higher than at any other point over the past 40 years. Since 2008, the rise in self-employment was largest in professional, scientific and technical activities which include roles such as management consultancy, book-keepers, photographers and chartered accountants. According to the IPPR Report (2015), 40 per cent of the growth in UK employment since the second quarter of 2010 is accounted for by the rise in the number of self-employed workers.

Looking across the regions of England along with Scotland and Wales, 17.3% of Londoners in work were self-employed. The second highest self-employment rate was in the South West at 16.6% followed by the South East at 15.8%. The North East had the lowest self-employment rate at 10.8%.

Comparing January-March 2014 with the same period in 2009, self-employment increased by around 19% in the UK, equivalent to around 720,000 people. This percentage increase was the third highest in the EU, behind Slovenia (23%) and Estonia (20%), although these countries are relatively small in comparison. As the IPPR Report (2015), there are debates about whatever this rise is the consequence of the strong labour market recovery or the lack of alternative employment choices.

As it can be seen on figure 3, UK, the Netherlands and Ireland are the only north/western European economies to sit above the European average, with self-employment rates of around 14 to 15 per cent.

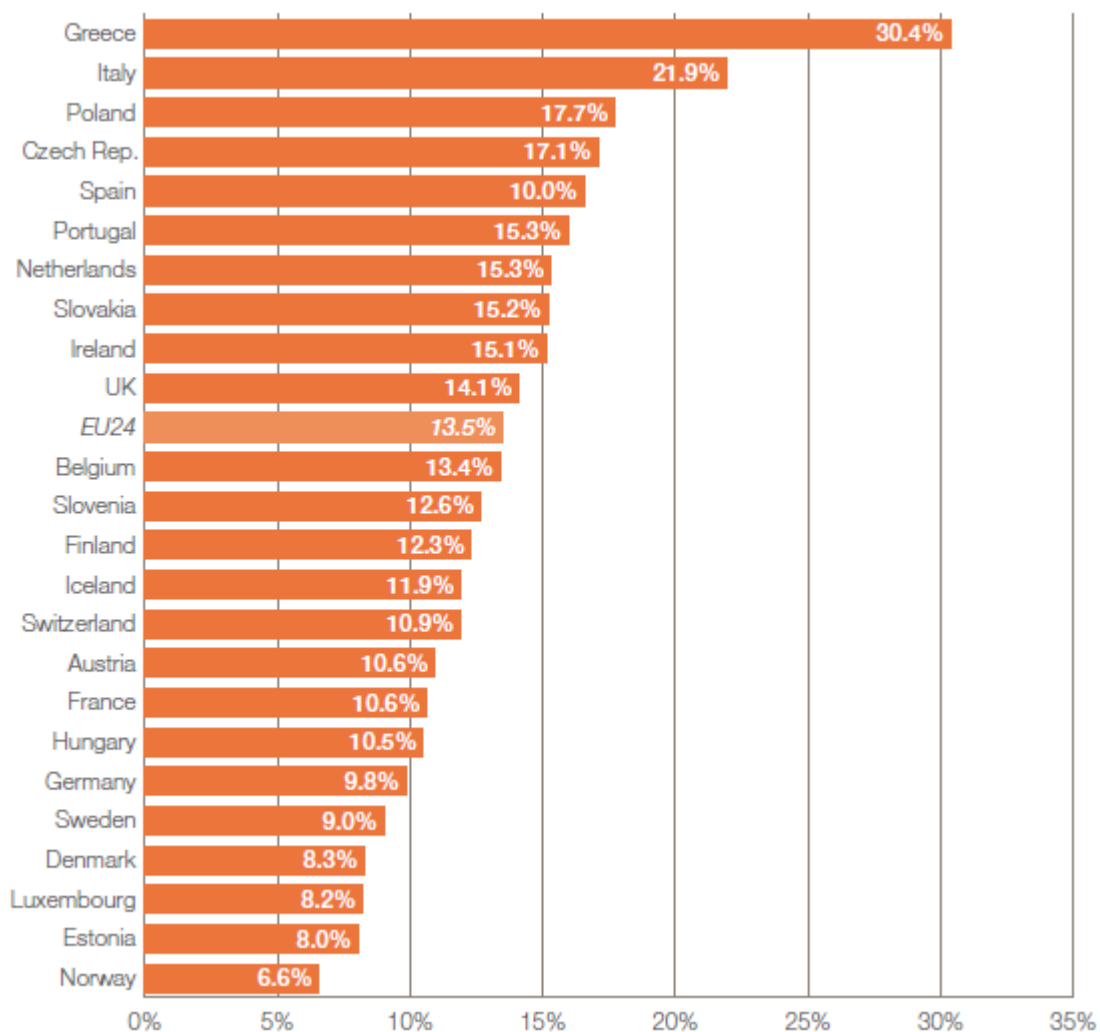


Figure 6 Self-employment rates (2014), Source: Eurostat Labour Market Database

In the UK, just 17 per cent of self-employed workers themselves employ staff of their own. This is the lowest rate in Europe and around half the average across the European countries in the IPPR Report (2015).

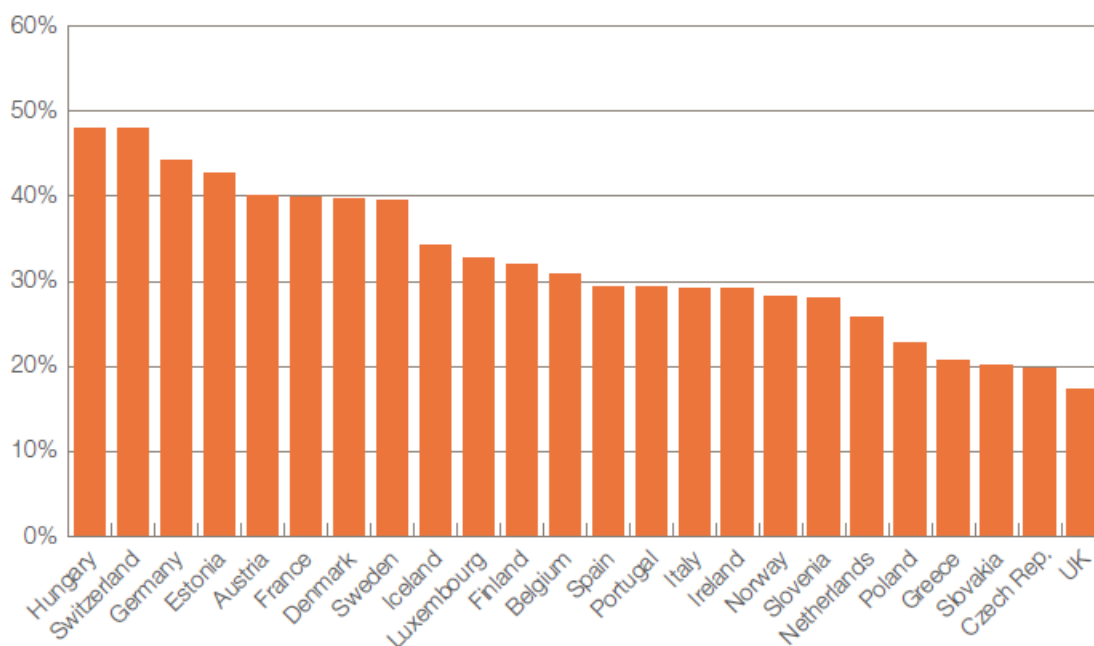


Figure 7 % of self-employed workers with employees (2013) Source: Eurostat Labour Market Database

The proportion of young, self-employed people in the UK is less than 5%. The UK youth self-employment rate has increased by about 1 percentage point since the second quarter of 2008, although this rise includes a dip in late 2012 and 2013. The rate is now rising again but has not yet reached its previous level. (IPPR, 2015) According to the Eurofound (2015) research, in the EU28 in 2013 there were 2.67 million people between 15 and 29 who were self-employed. This means that only 6.5% of the total young European population opt for self-employment.

According to the Eurobarometer survey (2012) that conducted a research on the overall UK population in 2012, 33% of the UK respondents would chose self-employment over employment. This number is by 5% lower than the EU average. The majority (72%) of the UK respondents believed that self-employment is not a feasible at all or not very feasible for them. This number is also higher than the EU average (67%). 24% of the UK respondents indicated that they have started, taken over or taking steps to open their businesses. The biggest fears of self-employment among UK respondents were the possibility of going bankrupt and the risk of losing home/property. The perception of entrepreneurship is generally quite good in the UK. 84% of the respondents agreed that entrepreneurs are job creators and 79% of the respondents agreed that entrepreneurs create new products and services that benefit the public. Compering these numbers to the EU average, we see similar results. A large majority of EU respondents agree that entrepreneurs are job creators (87%); and that entrepreneurs create new products and services that benefit all of us (79%).



As the Global Entrepreneurship Report (2016) noted, the UK is placed on the 9<sup>th</sup> place on the Global Entrepreneurship Index Map. This index measures entrepreneurial attitudes, aspirations and activity across the globe.

### Gaming education in the UK

The year-long Teaching with Games (Sandford R., Ulicsak M., Facer K., Rudd T., 2006) project aimed to extend our understanding of the ways in which commercial computer games might be implemented in a formal educational setting, drawing on empirical evidence and examining the real-world use of selected commercial titles in schools in the UK in 2006. (Sandford et al., 2006). The major finding of the research was that it recognised that the generational divide in games play is still evident with a significant majority of teachers (72%) not playing games for leisure, compared with 82% of students playing games outside lessons at least once a fortnight. Moreover, the majority of student as well as teachers reported that games motivated them to engage in learning. However, as the research revealed, the motivation of the students can be enhanced via two ways: 1.) providing students with games that they are familiar from their home environment and 2.) giving students games that they have certain degree of autonomy when playing with it. (<https://www.nfer.ac.uk/publications/FUTL49/FUTL49.pdf>)

Ollie Bray (The Guardian, 2012), the National Adviser for Emerging Technologies in Learning at Education Scotland, believes that one of the many benefits gaming brings to education is giving teachers a chance to innovate and do things differently. He says that learning does not come from the game itself but can become the context for learning. In addition, he implies that research proves gaming in education has positive impact on students. He used Sims City, simulation game, to teach his students about urban development. In the game, everyone starts at the same point with a same final goal, which is to build the city. To achieve the final objective, students used different routes that captured and engaged the imagination.

## Focus Group

The focus group activity took place on the 27<sup>th</sup> January 2016 in Inova's headquarter office in Sheffield, UK. Ten young adults and five stakeholders attended the focus group activity together with three facilitators, Inova hosted 18 people. The 10 people from the target group were all students and belonged to the age group of 18-35 years old. To ensure that these people belong to the required age group, they signed a consent form on they needed to indicate their age. The stakeholders came from universities, research centres and civil society organisation.

The aim of the focus group activity is to find out information to ensure that the EntrInno online game will be a valuable tool for the project's target group and stakeholders. Moreover, it contributes to the Gap Analysis report of the project.

The focus group lasted for 2.5 hours from 13.00-15.30.

The focus group was also recorded, which is available upon request.

The recruitment process was the key element of the focus group as Inova was dedicated to gathering people who match the criteria of the project's target group as well as are able to constructively contribute to the focus group. Inova perceived that it is better to recruit participants from its own network rather than externally advertise the focus group. In this way, Inova could ensure the high standard of quality within the focus group. Inova utilised its professional network to recruit participants for the focus group. While looking for participants, it was important to establish a rapport with the potential attendees and inform them about the sake of the research. Thus, Inova recruited people who are interested in the topic.

With regard to the stakeholders, Inova directly reach for its contact at the University of Sheffield. The cooperation between Inova and the University of Sheffield dates back several years. Inova had the privileged to welcome one participant from the university which is ranked in the top 80 universities in the world. In addition, the Consultancy Academy has been working in partnership with Inova Consultancy for several years. The Consultancy Academy is a community of academics and practitioners who specialise in methodology for Growing Businesses across the UK. Inova welcomed two participants from the Academy. Other participants from the stakeholder group came from Civil Society Organizations. As it can be seen, in terms of the stakeholder group, Inova managed to gather a diverse group of people, ensuring interesting contributions during the focus group activity.

In respect of the target group, Inova gathered ten students attending The University of Sheffield and Sheffield Hallam University. As the consent form proves, all the participants from the target group were less than 25 years old. In order to guarantee the good mixture of the group, Inova invited

participants from different degree programmes thus it ensured the diversity of the group. The recruitment occurred through the personal contact and professional contacts of Inova employees.

### Overview of the participants

As it was mentioned earlier, the priority of the recruitment was bringing together a diverse group that is able to constructively contribute to the topic of the focus group. The group conversation led to many fruitful discussions among participants as the consequence of the good mixture of people with different perception and attitudes to entrepreneurship.

The following table offers a good overview of the participants of the focus group.

Name	Description
<b>Dr. John Kawalek</b> (stakeholder)	John's professional background is in IT and Management Consulting. He started his career in the manufacturing sector as a Programmer/ Analyst, Systems Analyst, and then as a Senior Systems Analyst. He then worked as a Business Consultant, working with a huge array of organisations, e.g. large private sector organisations such as IBM, Lotus, Rover Group, Jaeger Group, British Oxygen; also in the public sector working for DFID, & with French government departments, in the US, in large multi-million dollar companies, as well as with smaller and medium sized organisations. John has held Director level positions in a number of organisations.
<b>Ryad Chebbout</b>	Medical student University of Sheffield
<b>Jack Leonard</b>	Engineering MA student at the University of Sheffield
<b>Oceane Bounan</b>	French exchange student at the University of Sheffield
<b>Evaldina Alves</b>	Medicine MA student at the University of Sheffield
<b>Clare Symonds</b>	Business BA student at Sheffield Hallam University
<b>David Eagle</b>	Musician, self-employed
<b>Emma Pearson</b>	Self-employed, Craft jewellery
<b>Louise Balderson</b>	Business student at Sheffield Hallam University
<b>Emily Brough</b>	Business student at Sheffield Hallam University
<b>Andrei Ichim</b>	Biological engineering BA at the University of Sheffield (Romanian origin)
<b>Glyn Cartwright</b>	Managing director at the Consultancy Academy  The Consultancy Academy has had its roots in both business consultancy and in academia. Its partners all run successful businesses, and have had significant experience in growing and leading businesses.

### Chiles Cartwright

Chiles currently owns two companies, a consultancy business and a building materials supplier. Prior to owning his own businesses, he spent nine years working in management for international consumer brands.

Besides the participants, there were three facilitators present from Inova, namely Marina Larios, Elsa Dufay and Tamas Tuske. They all shared the responsibility of organising and moderating the focus group activities.

### Format Setting and Process

Inova's meeting room hosted the focus group. The arrangement of the room was convenient for the group because it enables the participants to freely interact and pose questions to each other and to the facilitators.

The facilitator explained the participants that basic house rules including emergency rules. He also indicated that the focus group would be recorded and photos would be taken. The ones who did not intend to be on the pictures raised hands.

The focus group started with a short welcome speech from the facilitators and the clear explanation of the reasons of the focus group. The facilitator introduced the EntrInno project to the participants, explained the objectives and the estimated outcomes of it. The partnership carrying out the project was also introduced to the attendees. It was important to discuss the purpose of the focus group so that the participants got aware of the fact why they had been invited to the activity.



Then, the focus group continued with a short ice-breaking session when everyone had the opportunity to shortly introduce her/himself.

The ice-breaking session was followed by an ice-breaking activity. The facilitator explained a short scenario to the participants:



*“You have your pay check after being unemployed for long. You go to the bank in order to cash it in. However, there is a bank robbery is taking place at the moment you enter the bank. You are the only one got shot in the bank but your injury is not serious. Do you consider yourself lucky or unlucky?”*



Each of the participants indicated why they thought they were either lucky or unlucky. It was interesting to observe the different perspective of each of the participants. Some considered him/herself really unlucky while some said they were extremely lucky.



The reason of this scenario case was to show participants that everyone has different opinion about the same topic and one must respect to each other's opinion. Respecting each other's opinion can encourage less outspoken people to speak up and share valuable information. As it was seen during the focus group activity, participants acknowledged each other's different view that was beneficial for the whole group.



#### Findings of the Focus group

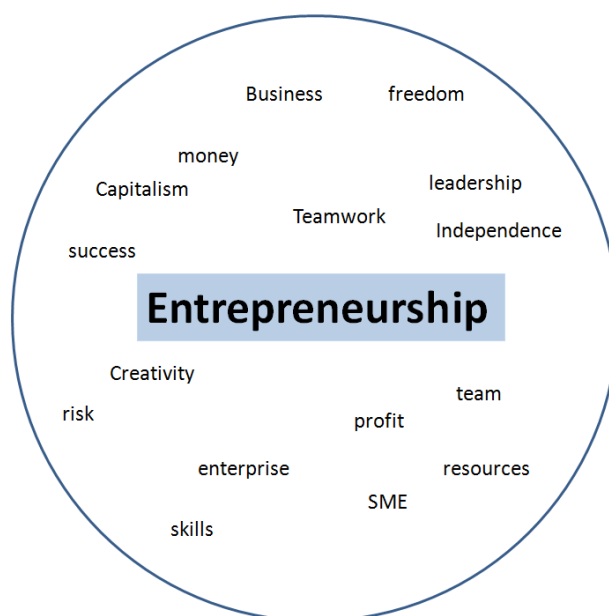
In order to identify the participants' knowledge about entrepreneurship, they were asked to rate their knowledge about entrepreneurship on a scale from 1-10. As it can be seen on the picture below, most of the participants rated their knowledge in the



first half the scale (<5).

Participants belonged to the stakeholder group showed higher knowledge in terms of entrepreneurship as it was estimated. Students studying business disciplines rated their higher as students attending non-business related courses. Looking at the scale where participants rated their knowledge we can conclude that it was a diverse mixture of group. The knowledge test showed a widespread picture at the end of the activity.

During the knowledge test, participants were also asked to say some words that they associate entrepreneurship with. In the circle below, these words are summarized. Interesting to note that participants mentioned the following words more than once: "freedom, money, business, leadership, success and independence".



The task was design to measure individual's knowledge about the particular topic. The second part of the task was a sufficient way to let the audience know that there are different interpretations of entrepreneurship and show them that individuals might have a different opinion about the same subject. The task lead to vivid discussions among participants and the facilitator had to intervene in order to keep the time allocated for this task.

In the next part of the focus group, the facilitator divided the group based on which target group they belong. The two separated groups answered the same set of questions about the success factors of entrepreneurs and if it is worth becoming an entrepreneur.

After the reunion of the two groups, the two facilitators revealed the responses that the participants gave. It was interesting to see that the majority of the responses were fairly similar. Participants agreed with the fact that certain skills are necessary for someone to become successful entrepreneurs. These skills are being proactive, being able to take risk, networking, flexibility leadership, communication, problem-solving and critical thinking. The stakeholder group added to the discussion that a role model, who can be the family or a person, is also really important for someone to become entrepreneur. The task evolved into a discussion between the groups. The main findings of the discussion were the followings:

- Take a stand for yourself
- Identify the right business for you
- Plan everything ahead
- Get aware of your target group
- Understand your personal resources

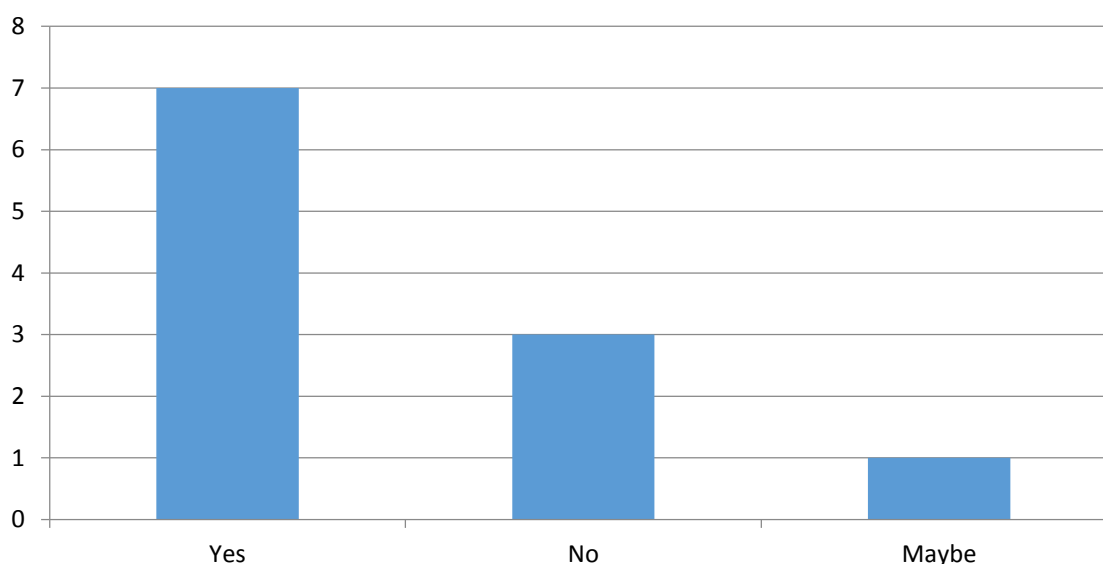
- Network
- Create a unique selling point
- Get the word out

After a short coffee break, the stakeholders got separated from the target group again. The groups led by two facilitators were asked different questions regarding the EntrInno project. In this section, the major findings of the task are revealed.

#### Target group I: Young adults

Participants from the young adult target group were asked if they see themselves as self-employed in the future. The vast majority of the students (7) said yes, 2 said no and only one indicated “maybe”.

### Would you like to be self-employed?



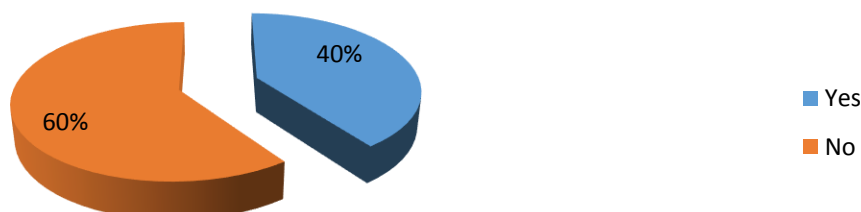
When young participants were asked about if they play video games or online games, 6 out 10 stated that they do not play games anymore. Nonetheless, some of them used to play but they stopped as the consequence of lacking of time and other commitments.

Participants stated that they play or play with games such as:

- SIMS
- World of War craft
- Zoo Tycoon
- Roller Coaster Tycoon
- Football Manager
- Theme Hospital
- Monopoly

- Travel Around Europe
- Poker
- McDonald's Game
- Language application

## Do you play video games or online games?



Among the participants, the so-called “Tycoon” games were popular. In these games, one must run a certain type of business, make profit and overcome obstacles. Games such as ZOO Tycoon or Roller Coaster Tycoon were among the most popular ones. It was interesting to observe, that not all participants realised that by playing with these game they actually developed several soft and entrepreneurial skills.

The online version of Monopoly was one of the first games that came to the participants’ mind when they were asked about games that develop entrepreneurial skills. They indicated that Monopoly helped them how to manage resource, leadership skills and financial planning. All these skills are relevant in the business field. Online poker was also a common answer among attendees. They indicated that poker teaches players how to take risk and manage resources at the same time.

Most of the participants agreed with the fact that an online entrepreneurship game would need focus on teamwork as teamwork is essential for entrepreneurship.

One of the participants stated that he occasionally downloads a game on his phone however after couple of months the game gets boring and it is hard to be interested in it anymore.

Participants agreed that transferable skills are those that are essential for becoming a successful entrepreneur. After a short discussion about it, young people agreed with the fact that these skills cannot be or can hardly be developed in the formal setting. These are the skills that the individual takes the responsibility for own development. The following skills were mentioned during the conversations:

- report writing



- negotiation
- presentation skills
- problem solving
- teamwork
- flexibility
- leadership
- communication
- time management
- taking initiative

As young people were asked how they develop these skills, they came up with various ways. Joining a sport team, a club or a society was one of the most frequently mentioned responses. In addition, using games or other online tools were also a way to develop entrepreneurial skills for young people. Finally, volunteering was mentioned as a potential way to develop the above-mentioned skills.

During the focus group, young people were also asked if they would use games to develop their entrepreneurial skills. Most of the young people answered yes to this question however each of them stated that it depends on the motivation of the game. In regards of the motivation, they would like to see the following aspects:

- If you would like to develop entrepreneurial skills, it is better to play in team because it teaches you teamwork which is essential for entrepreneurship.
- Working out a strategy to visit certain number of destinations, the most efficient way possible
- The game should focus on gaining points rather than completing and end goal
- Repetitive games are boring. Scene of the game should frequently change so users won't get bored.
- It should include "braintraining" tasks
- It should be an interactive game where players can communicate with each other and therefore share best practices.
- The game should be connected to social media platform because it is engaging for more people.
- It should include a to-do list that allocate your time and alarms you to do your daily game.
- Developing a realistic work environment with employees that have behaviour pattern. Players would receive hints of the real life implications of entrepreneurship.
- Achieving a goal in amount of time.
- Receiving awards that would motivate players to reach the end goal of the game.
- Achieving the top position on the leader board



- The game should pose series of challenge to players and users should overcome obstacles

### Target group II: Stakeholders

The stakeholder part of the group went to another room where they were asked slightly different questions.

Stakeholders believed that a game can be an engaging and a “real life scenario” style game could help learners to gain a sense of how it is to be in a certain business situation while remaining in a safe environment. The enterprise simulation games could help not only in the consideration of business skills, strategic direction, marketing and finance consideration etc. but also in the softer skills such as team working, communication and decision-making. Students (of all ages) could always engage with the competitive element of the game and upon reflection can highlight and appreciate the skills that they have been portraying as well as looking at how these can be applied within their own modules, assessments or external commercial ideas. An online game could boost attention and make learning fun for students. Also, stakeholders indicated that an online game tends to be immersive and more memorable than traditional learning tools. Moreover, it was stated several times that engaging students in computer games could make them more attentive and committed during class. In addition, delivering information with online games could be an interesting and effective way of teaching. Online games could also enhance creativity and motivation of the users. Respondents also mentioned that games could be an effective way for learners to test out that they understand a topic and can apply the materials that are being taught.

In the UK, there are several support structures available for young potential entrepreneurs. The participant from The University of Sheffield indicated the university’s enterprise scheme as a good practice in the UK. The University of Sheffield Enterprise brings together want-to-be entrepreneurs to make ideas happened and create opportunities to develop ideas.

The stakeholder group was also asked about what they think that the necessary soft skills for an entrepreneur are. They came up with identical answers as the young adult target group: report writing, negotiation, presentation skills, problem solving, teamwork, flexibility, leadership, communication, time management and taking initiative. Most of the participants agreed that the most important skill that an entrepreneur must have is the communication skill; as entrepreneurs constantly need to keep in touch with customers, suppliers or partners. How they communicate is a key to be successful.

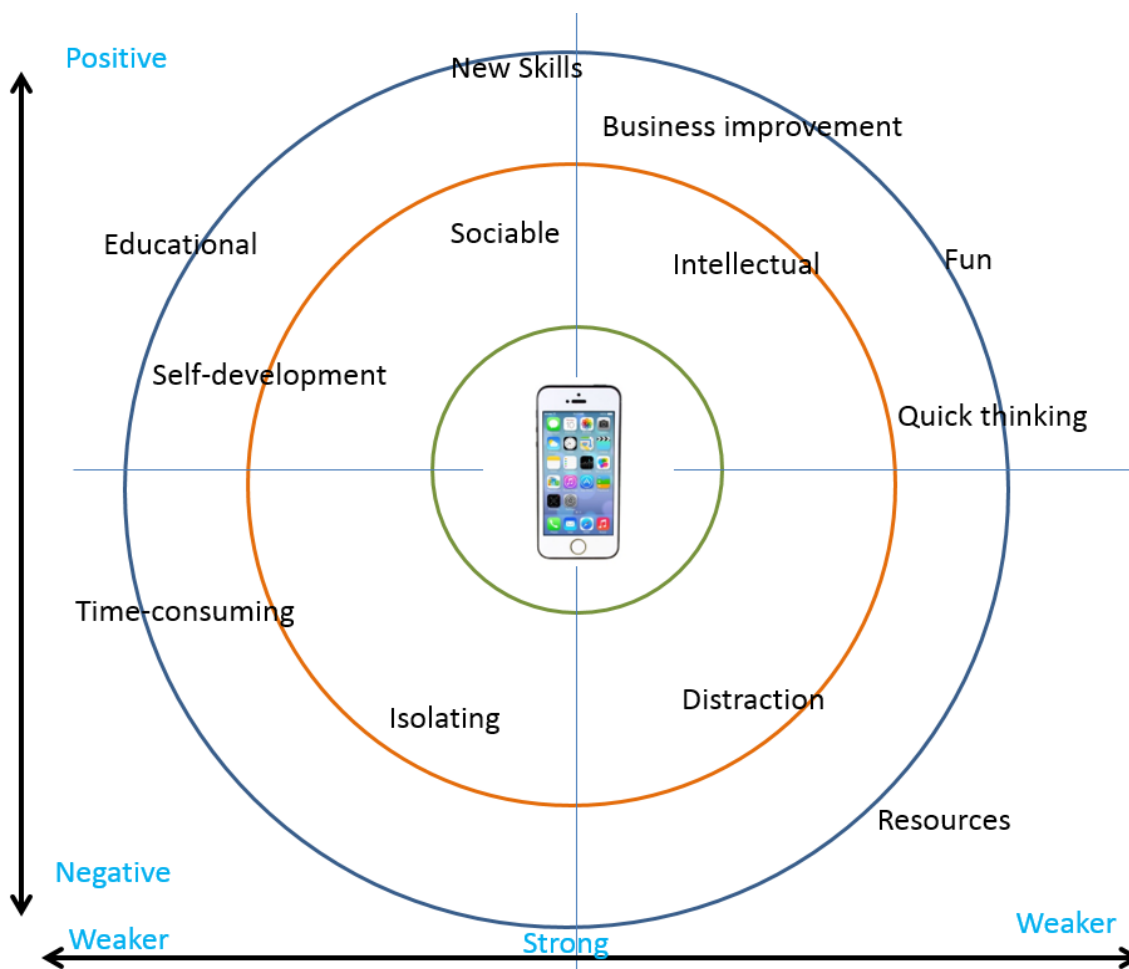
In conclusion, participants were very positive about implementing a game that focuses on developing entrepreneurial skills for users. They believed that it is an interesting and effective way of teaching

and engaging users with learning. It could boost motivation for students as well as other users. However, it must be highlighted that there was a minor debate about the real advantage of implementing games in education as they do not necessarily enhance learning for students. It was believed that games should be a complementary tool of a fuller learning curriculum and not replace other educational methods.

### Diagram

Participants were reunited again and given a task that they had solve together. The facilitator drew a diagram on the white board and its middle represented the online game. Participants had to come up with factors that influence users when they play the online game. Moreover, participants also had to indicate if this factor is either positive or negative and how influential it is on users.

The facilitator took the lead on the task and showed the participants a couple of examples in order to make them understand the task. The diagram stimulated quite interesting discussions as participants had different opinions. It occurred that one factor was perceived as a positive factor by one person, but seen as a negative by another. Below, the main finding of the task can be seen. Participants of the focus group indicated the positive characteristic of the game such as that it develops new skills, makes the individual sociable; it is educational whilst players still have fun. In addition, participants also revealed the negative effects of online game such as it is time-consuming, it could distract students from learning and players need to have the necessary resource (smartphone, computer). As the diagram suggests, people would like to see a game that develops new skills in relation to business improvement, it is fun to play and people can play in teams so that they can socialize. Participants put emphasis on the educational aspect that it is crucial for the success of an online game. Otherwise, people would feel that it is just time-consuming. Moreover, it is important to have a game that does not require an expensive device so that it would be available for the wider public.



## Greece

### National State of the Art Report

Since 2008 Europe is experiencing a constraint financial environment, an outcome of the 2008 global financial crisis, while at the same time the currently implemented fiscal adjustment policies in certain countries such as Greece have increased unemployment rates particularly among the young. This is happening despite the existence of high quality human capital and research capabilities. The situation has, as a result, triggered the implementation of policies that promote entrepreneurship as one promising solution. EU policy objectives as expressed in the Lisbon Strategy set a target of 15 million new jobs by 2010 and point out to the development of entrepreneurial capital and the creation of an entrepreneurial society.<sup>15</sup> Europe 2020 strategy that followed aims at delivering growth which is *smart*, through more effective investments in education, research and innovation; *sustainable*, thanks to a decisive move towards a low-carbon economy; and *inclusive*, with a strong emphasis on job creation and poverty reduction. The strategy is focused on five ambitious goals in the areas of employment, innovation, education, poverty reduction and climate/energy.<sup>16</sup>

Greece under the National Strategic Reference Framework and the Operational Programme “Education and Lifelong Learning” has implemented a number of actions towards standardizing a framework for supporting innovation and entrepreneurship in higher education institutes. More specifically the national strategy for education aims to increase the quantity, quality and effectiveness of investments in human capital, in order to upgrade the Greek educational and vocational training system. One of the main goals of the O.P. “Education and Lifelong Learning” is to include actions that offer to everyone basic education related to innovation and entrepreneurship, support new entrepreneurs as well as new innovative entrepreneurial ideas and preparatory actions.<sup>17</sup>

Regarding youth entrepreneurship in Greece two researches conducted by the Foundation for Economic and Industrial Research in the years 2012-2013 and 2013-2014 respectively reveal some interesting findings. More specifically Early-stage entrepreneurship as measured by the Total Early-stage Entrepreneurial Activity (T.E.A.) index showed the following figures<sup>18</sup>:

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<sup>15</sup> In European Commission “*Entrepreneurship in Europe*” Green Paper Brussels, EC, 2003.

<sup>16</sup> In [http://ec.europa.eu/europe2020/europe-2020-in-a-nutshell/priorities/index\\_en.htm](http://ec.europa.eu/europe2020/europe-2020-in-a-nutshell/priorities/index_en.htm) accessed on 12/01/2016 at 14:30.

<sup>17</sup> More information available at <https://www.espa.gr/en/pages/staticOPEducationandLifelongLearning.aspx> accessed on 12/01/2016 at 14:46.

<sup>18</sup> Figures presented here were obtained from the Foundation for Economic & Industrial Research (IOBE/FEIR) “*Entrepreneurship in Greece during 2012-2013: Are there any Signs of Recovery in Small Entrepreneurship?*” and Stavros Ioannides, Ioannis Giotopoulos “*Entrepreneurship in Greece: The Dynamics of Youth Entrepreneurship*” IOBE/FEIR, Athens - Greece.

YEAR	T.E.A. index %
2011	8%
2012	6.5%
2013	5.2%
2014	7.8%

Fluctuations observed are due to the deep and prolonged economic recession and the deteriorating employment possibilities. What is most important is that in 2013 Greece was ranked first among innovation-driven economies in the Global Entrepreneurship Monitor (GEM) with a percentage of 12.6. Accordingly, 17.3% of the early-stage entrepreneurs stated that many customers considered their products as innovative. In geographical terms T.E.A. index ranged from 11.6% in the region of Central Macedonia to 1.7% in Central Greece, 11.1% in West Macedonia and 7.9% in the Peloponnese.

The average Greek entrepreneur - as stated at the Global Entrepreneurship Monitor (GEM) is more likely to be male, 25-44 years of age, educated with a university degree, operating in the consumer services sector.<sup>19</sup> However the percentage of women involved in early-stage entrepreneurship was 4.3%. What should be noted is that the number of Greek who believes that they possess the abilities and skills to start a business remained high for 2013 at 46% while the fear of failure was at 49%.<sup>20</sup> 4.8% abandoned a business in 2013 and Greece ranks first among innovation countries regarding the indicator of business exit with the main reason being lack of profitability (51%). Last but not least it should be noted that Greek entrepreneurship is dominated by micro, family-owned firms getting their financial support from informal investors mainly family and friend.<sup>21</sup>

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The situation regarding entrepreneurship education for sure cannot be characterised as ideal since despite the fact that the link between innovation and entrepreneurship is highly acknowledged, in Greece universities that are the main sources of innovation rarely lead their students into

<sup>19</sup> For detail information on entrepreneurship in Greece please see the Global Entrepreneurship Monitor (GEM) country profile for Greece available at <http://www.gemconsortium.org/country-profile/66> accessed on 12/01/2016 at 17:13.

<sup>20</sup> As above (5).

<sup>21</sup> As above (4).

entrepreneurship actions.<sup>22</sup> Furthermore, bearing in mind the link between entrepreneurship and innovation and innovation being within the mission of universities there limited examples in Greece of entrepreneurs that transferred innovation from universities.<sup>23</sup> In general the issue of entrepreneurship education in Greece is still at a rather embryonic stage. The Technical University of Athens though already from 2008 identified and understood the need to incorporate entrepreneurship education to a strategic design of university curricula to provide engineers with entrepreneurial and management skills. The main issues to be investigated though are first to relate entrepreneurial education with the Greek particularities and secondly to see whether the promotion of entrepreneurial education in the tertiary education could trigger positive effects for the country's research and productive system.<sup>24</sup>

Thus there are only a few entrepreneurship units in Greek universities. More specifically the Technical University of Crete has established the Innovation and Entrepreneurship Unit with the aim to promote entrepreneurship among young people, to help them develop an entrepreneurial attitude and spirit and to develop the necessary organizational and management skills. The Athens University of Economics and Business (AUEB) has also established the Athens Center for Entrepreneurship and Innovation which educates and supports young entrepreneurs. These are not the only examples as several Greek universities have established Innovation and Entrepreneurship Units with the aim to support and promote entrepreneurship among the young.

Regarding the status of online educational games in Greece we can note that social and serious games in an educative setting are not still widely used in education. Accordingly, their potential is not fully utilized. Social games used in education lack pedagogical design and while current generation of trainees is familiar and ready for games their trainers are not. By this we mean that it is not in the trainers' mentality to utilize games in the learning practice. In addition, gaming in Greece has a negative connotation compared to the rest of the world. We should note though that there is a gap in the necessary ICT infrastructure in schools and universities. The situation is reversed at the private training providers where state of the art equipment and use of new technologies in the classrooms are the rule. Due to the centralized nature of the educational system serious and social games would need to be introduced from the central level.

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<sup>22</sup> In Michalis N. Xenos "The Framework for Innovation and Entrepreneurship in Higher Education in Greece - The Hellenic Open University Case" Journal of the Systemic Innovation of Education (JSIE) Vol.1 Issue1 pp.75-81, 2011.

<sup>23</sup> As above (8) p.8.

<sup>24</sup> In L. Papayannakis, I. Kastelli, D. Damigos and G. Mavrotas "Entrepreneurship education in Greece: Experience and challenges for a Technical University" Paper prepared for the DIME-LIFE/NTUA Athens Conference, November 30-December 1<sup>st</sup> Unknown year.



There are though business games that are used in the context of specific courses in tertiary education in Greece. Here we will present several of these games used in universities in Greece. The *Business Strategy Game* developed by the University of Alabama is used at the Management Game course at the School of Electrical and Computer Engineers of the Technical University of Athens (NTUA). In addition, the game is also used in the context of the Business Strategy course at the Full-time MBA at the Athens University of Economics and Business (AUEB). NTUA also uses an internally developed business administration game named *Epixeirein* which simulates the entire business administration environment. The Technical University of Crete uses the *4 Virtual Platforms* a business game developed as part of the course titled “SMEs & Innovation” offered by the Innovation and Entrepreneurship Unit. Lastly the globally known Beer Distribution Game or *BeerGame* developed by the Massachusetts Institute of Technology (MIT) is used in the context of the Supply Chain Management course at the School of Mechanical Engineering of the National Technical University of Athens.<sup>25</sup> We could sum this up by saying that games used in tertiary education in Greece are specially used in the context of specific courses and aim at instilling specific skills to the participating students.

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<sup>25</sup> Information in this section was obtained from teaching staff and graduates of NTUA and AUEB who experienced the mentioned business games during their studies and from the website of the Technical University of Crete [www.tuc.gr](http://www.tuc.gr) accessed on 13/01/2016 at 12:30.



## Focus Group Results

### Recruitment

For the purposes of the field work, KMOP organised two focus groups, one consisted of stakeholders and young people aged from 18-35 and a second one consisted of stakeholders. In order not to waste valuable time, it was decided to contact directly partner organisations and experts with whom we have collaborated in the past and we were sure that they could provide us with updated knowledge and education. Besides, our contacts from VET partner organisations and Universities helped us in the recruitment of the young people aged from 18-35 years old. For that reason, all communications were made through phone calls, so there is no evidence concerning recruitment.

### Overview of Participants

Our aim was to have a group of participants who are relevant to the project topic and at the same come from various sectors and expertise. In particular, the focus group with stakeholders included the following participants:

1. Pyrros Papadimitriou, Associate Professor in International Economic Relations at the Department of Political Science and International Relations of the University of Peloponnese
2. Sotiris Pantazis, Project Manager, at HEADWAY Economic Consultants Ltd, a Greek company that provides consulting services in the public and the private sector
3. Giannis Chatziris, Business Development Consultant, working as freelancer
4. Nikos Nestoras, Director of the Vocational Training Center "Gaia"

The focus group with young people aged from 18-35 years old included the following participants:

1. Ms C. G., 26 years old, electrical engineer and MBA holder
2. Ms V. P., 24 years old, psychologist
3. Ms D. H., 27 years old, economist, student of MSc in Statistics
4. Ms E. A., 22 years old, student on Agricultural Economics & Rural Development

All participants to the second focus group wish to start their own business. We tried to have young people coming from various and different subjects.

The focus group with stakeholders was facilitated by Ms Eleni Sakellariou and the focus group with young people was facilitated by Ms Antonia Torrens.

## Format, Setting and Process

First of all, KMOP has to highlight that it was impossible to organise both focus groups at the same time, as it was difficult to find a suitable date and time for all participants.

In particular, KMOP faced many difficulties in organising the focus groups with the stakeholders, as all of them are professionals with many obligations. Respecting their time, KMOP made sure that the focus groups session would not last more than one hour. The focus group with the stakeholders took place in KMOP's office in Kifissia, on the 25<sup>th</sup> of January 2016. KMOP decided to have the focus group meeting with them not in our headquarters, but in our office in Kifissia (a suburban of greater Athens area), as this was the more convenient location in terms of access for the participants. KMOP had arranged a focus group with 5 participants; however, one of them was not able to attend due to health issues. Before the discussion on topic started, the participants had the chance to introduce themselves and to get to know each other. The fact that the facilitator knew or had collaborated with the stakeholders before made them feel very comfortable. The discussion was based on the questions described in the focus groups guidelines; however, in some cases the participants had a "free-flowing" discussion. The event went very well and all participants expressed their strong interest in the project, especially in the game to be developed.

Next day, the 26<sup>th</sup> of January 2016, KMOP had the focus groups discussion with the young people. This event took place in our headquarters, in Athens. In total, 4 young people attended the event. Before the main focus group activity, KMOP took some time to inform the participants about the activities of our organisation and of course about the EntrInno project. Moreover, the participants had the chance to discuss with each other and to share some thoughts and experiences off the record. KMOP used the questions and the activities of the guidelines, but in general, we encouraged them to speak more openly. The whole event lasted about 2 hours and went very well, as the participants felt very comfortable. All of them expressed their interest in the EntrInno game and they asked to inform them when the game will be released.

Both focus groups sessions took place in Greek and all participants were informed that the discussion would be voice recorded.

## Outcomes of discussions

### Focus group with stakeholders

- **What do you think is the current state of entrepreneurship amongst young people in your country? Is there a lot of interest and knowledge in enterprise?**

Being in the 6<sup>th</sup> year of the economic crisis, with a very high unemployment rate especially for young people which is almost 65% and at the same time the continuous increase of taxes imposed to

enterprises, it would not be feasible to say that the current state of youth entrepreneurship in Greece is under the best conditions. Indeed, the economic crisis in Greece has destroyed many sectors and entrepreneurial attempts. However, despite this negative climate, there are some good examples of entrepreneurial activity among young people which could be considered very encouraging for the future. There are some very successful startups, in the sectors of exports and IT services.

There is a strong interest in the entrepreneurship by the young people in Greece, especially last years. This is also associated to the high unemployment rates as well as to fact that the young people cannot easily find jobs in existing enterprises, so they consider how to exploit their knowledge and skills and if they have a small capital to start their own business.

A key feature that characterizes the youth entrepreneurship in Greece is that it is rather an opportunity entrepreneurship, not a necessity entrepreneurship. For many young people, entrepreneurship is just a chance to combat unemployment and to have a job, not to exploit some good chances and create something new. For this reason, a very large most of the young entrepreneurs are self-employed. Besides, a very large percentage of individual businesses in Greece is not entrepreneurship in the typical way, it is essentially a substitute of dependent employment in the form of the provision of freelance services. In Greece, 1 in 2 new young entrepreneurs is not an entrepreneur in fact, but he/she works for only one employer as a freelancer and has to pay his/her own insurance contributions. So, the current state of entrepreneurship in Greece is worse than figures show and unfortunately the young people do not have the mood to find a good idea and go ahead. This is also associated to the one of the biggest problems that Greece faces last years, which is the phenomenon of brain drain; the last five years of the crisis about 220,000 young people left the country. So the young people left behind have no many choices and for this reason they choose to become necessity entrepreneurs.

Finally, as regards the entrepreneurial knowledge among young people is rather limited in theory, as entrepreneurship education is at a very initial stage in Greece. The establishment of Innovation and Entrepreneurship Units in higher education institutes aims to improve young's people knowledge and lead them to into entrepreneurship actions.

### **What support is available to potential entrepreneurs?**

The state helps young people having created some structures which support youth entrepreneurship, offering some start up subsidies and establishing some incubators in Universities, Municipalities and Chambers. Moreover, young entrepreneurs have favorable tax treatment, as they are exempted from paying some taxes and charges the first three years from the establishment of their business.

In addition, there are some important private initiatives, which include the organisation of entrepreneurship and innovation competitions, funded by banks and companies in collaboration with higher education institutions. These competitions help young people to get financing and at the same time to gain some visibility. Also, startup weekends offer a good support to young people, as they have the chance to develop their business ideas within 48 hours and present them to investors.

**Do you feel that young people have the entrepreneurial skills that they need to be successful in the business world (either to set up their own business or work for someone else)?**

One of the biggest problems in Greece is that young people do not have entrepreneurial skills needed to be successful in the business world. This is related to the fact that entrepreneurship was not “cultivated” in Greek Universities until recently and the higher education is not linked to the labour market. This is a huge problem, because companies cannot find the staff with skills they really need and seek, despite the huge rate of unemployed graduates. So, there is no matching of labour supply and demand due to the lack of those entrepreneurial skills which needed to succeed in the business world.

In addition, young people in Greece are a generation that has grown up under very good economic and social conditions. There was no need for them to develop such skills, as most of them preferred a stable job in the public sector. Later, the economic crisis has affected also young people’s education, so there were no many chances for them to develop their business skills.

Even though the Greek young people have lower levels of entrepreneurial skills in comparison to the young people of other countries, they have enough qualifications which could help them to succeed in the business world. In particular, most of them have a graduate degree and almost all of them know English very well. Moreover, young people are very hard working, they are agile and flexible and can quickly take advantage of some opportunities. They act with spontaneity, which is a feature of Greek culture and have the business acumen, a term which characterizes the Greek entrepreneurial reality.

**What are the skills you feel are most important for young people to develop?**

All stakeholders agreed that the most important skills that the young people in Greece have to develop are the following:

- Risk taking
- Adaptability
- Flexibility

- Problem solving
- Creativity
- Planning Skills
- Need for achievement

**Which of these skills do you feel is most lacking? What should the training courses aimed at developing entrepreneurial skills be focussing?**

The skills that most lacking these days concern mainly risk taking and adaptability. These are the skills that have to be put special emphasis on, taking into account that Greek young entrepreneurs and potential entrepreneurs have to work in a very unstable environment, under difficult economic, social and political conditions.

In addition to these skills, another very important skill is the understanding of market. This is something missing, as most young people do not fully understand the business market and do not have the ability to evaluate business ideas.

All stakeholders agreed that in order to develop the above mentioned and other entrepreneurial skills, the training courses should focus on more practical methodologies and their content should be adapted to the labour market needs.

**What are the most common training methodologies used at the moment to develop such skills?**

The training methods currently used are mainly the traditional teaching methods, which include face to face classes, with exercises, case studies, role playing games. There is a modernization as regards the content of the training but not as regards the media used for training. There are no many ICT applications which support the training to develop entrepreneurial skills.

**Are you aware of any online games that can support people to develop these skills? If so which?**

All participants of this focus groups responded that they are aware about the existence of online games which could contribute to the development of entrepreneurial skills, however, they could not name many of these games. The only games they mentioned were the virtual enterprise game, created by the Junior Achievement Greece and the leadership and business decision game developed by L' Oreal Greece, addressed to MBA students.

### **Do you think that online games could be successful in teaching these skills?**

Online games can be really successful in teaching entrepreneurship and specific entrepreneurial skills. They would be very welcome as an education tool by young people as most of them play online games in their free time. Especially online simulation and strategy games could help them very much in understanding the real business world and market.

### **What are the benefits of online learning over face to face learning?**

The first benefit of online learning mentioned was that it is more appealing for young people to be educated through digital media and tools, as they are very familiar in using them daily. Besides, they all agreed that online learning offers flexibility, as students can learn on their own pace, in any place, at any time. Through online learning, one can attend classes provided by trainers/professors and Universities all over the world.

### **What would you like to see in a new game designed to develop entrepreneurial skills?**

A new game to develop entrepreneurial skills should be definitely connected to the business reality of the player. In addition, it should give the player the possibility to assess the skills learnt/ developed in each stage/level of the game.

### **Focus group with young people**

Participants rated their knowledge about entrepreneurship. The exercise found out that participants had an average knowledge of the topic. After this, the participants were asked to mention what are the 2-3 words that come to their mind when they think of entrepreneurship. Their answers are presented below:

1<sup>st</sup> participant: innovation, change and taxation

2<sup>nd</sup> participant: risk and development

3<sup>rd</sup> participant: innovation and development of knowledge and skills

4<sup>th</sup> participant: risk, consistency and flexibility

### **Are you familiar with the term 'entrepreneurship'? Who do you identify as an 'entrepreneur'?**

All young participants responded that they are very familiar with the term of "entrepreneurship", most of them due to their studies.

They define as an entrepreneur someone who has some fresh ideas, who is informed about the new chances and is willing to implement them. Entrepreneur is someone who wants to implement an investment, has an innovative idea and uses a set of skills and competences, in order this investment to become reality and to be successful.

**What kind of skills do you consider to be entrepreneurial? – Discuss the various ideas they have and write on a flip chart.**

The participants mentioned the following skills that they consider entrepreneurial:

- Risk taking
- Analytical thinking
- Decisiveness
- Consistency
- Inventiveness and creativity
- Intelligence

**Which of these do you consider to be the most important?**

The most important skills in their opinion are:

- Risk taking
- Creativity

**Do you think you have these skills? Were they taught to you in school/college/university?**

The participants responded that they think that have some of these skills, however, all of them agreed that entrepreneurial skills are mainly cultivated and developed during the business practice.

They were taught these skills in university, in some modules, but only in theory. They did not have chance to put theory into practice.

**If yes; Discuss how these were developed (through practice, game playing, team work activities etc).**

**If no; Discuss how they might be developed?**

They had the chance to develop these skills through team work activities and exercises. One participant had also the chance to participate in a game as part of a negotiation course. She found that the game helped her develop some negotiation skills.

**How do you currently improve your skills? (i.e. do you attend formal training courses, do you do distance learning courses/ watch educational videos online etc)**

All young participants said that they usually attend some seminars and workshops in order to improve their skills. Occasionally, they watch educational videos and search for relevant material on the web. They rarely attend free online courses.

**Do you own a personal computer, smart phone, tablet or other internet device? Which?**

All participants own a personal computer, a smart phone and a tablet.

**Do you use interactive online tools to develop your entrepreneurial skills?**

- **YES - What kind of ways do you use?**
- **NO – Can you think of any?**

They answered that they do not use interactive online tools to develop their entrepreneurial skills, they could not think of any, except of one respondent who has used an online game as part of her MBA studies. All also added that they would use such tools if they had the chance.

**Do you play Video or Online Games? – If yes, what type of games (i.e. Action, shooter, Adventure, Role-play etc)**

They rarely play video or online game due to lack of time. When they play, they prefer action and role-play games.

**Do you have game applications on your phone?**

- **YES – What kind of games?**
- **NO – Why not? Do you think they are not useful?**

Yes, mainly action games and quizzes.



**Are you aware of any games that are related to entrepreneurship? If yes, which?**

Only one participant could said that she is aware of games related to entrepreneurship. These games are “Business Strategy Game” and “Global Management Challenge”, which she played as part of her MBA studies.

**Do you think that games could be used to develop entrepreneurial skills?**

- YES – Why?
- NO – Why?

They all think that games are considered one of the best methods to develop entrepreneurial skills, as they combine knowledge and entertainment.

**Would you use a game that aims at developing your entrepreneurial skills?**

- YES – Why?
- NO – Why?

They answered that they would use a game that aims at developing entrepreneurial skills, as they think that games could help them develop their skills in a very efficient way.



## Cyprus

### National State of the Art Report

As a term, entrepreneurship is quite broad. It cannot be defined within a specific context, and as a practice, it cannot be constrained within limiting barriers. Entrepreneurship is unique in that it is accompanied by openness to innovation and at the same time it can be shaped by changes in the ecosystem. As mentioned in the Position Paper on Youth Entrepreneurship, “entrepreneurship is not only a form of employment, but also a way of realising innovative ideas and solutions” (European Youth Forum, 2011, p. 2)

In Cyprus, a subsector of entrepreneurship, trading of goods and services, has been a flourishing practice for a long time. Cyprus has a geographical position that facilitates the link between the eastern Mediterranean region and Europe, building a bridge between the West and the East. This fact has been important for the development of the business sector as, apart from local businesses, several foreign companies establish a base in Cyprus. From simple business ventures such as exchanging goods and services, to the development of a small, local business to International franchises, Cyprus hosts companies from diverse industries and service sectors. Innovation and entrepreneurship have been developing slowly, but steadily.

Entrepreneurship presents itself in different forms; Products, Services, Technology, Improving existing knowledge or product etc. During the last few years, there have been several initiatives that strengthen entrepreneurship and innovation culture in the Republic of Cyprus. The financial crisis that led to catastrophic events since 2013 strengthened the resolve and created a sense of urgency to leverage entrepreneurship as a vehicle to financial recovery. There is definitely a need to support the development of innovation and entrepreneurship as one of the pillars to financial growth and a better quality of life for all the citizens. There are many reasons to support this effort and the reasons are described in this report.

According to PwC’s report on Cyprus’s professional services, Cyprus ranks 33<sup>rd</sup> (since May 2012, for the forecast period 2012-18) out of 82 countries. The ranking is

*“based on 90 indicators covering the political and macroeconomic environment, market opportunities, policy towards private enterprise, competition and foreign investment, foreign trade and exchange controls, taxes, the labour market and infrastructure. The indicators, which are based on both quantitative and qualitative data, cover a five-year forecast period and are compared with the preceding five years.” (PWC Report, 2012)*

According to the global competitiveness rankings for 2012-13 that the World Economic Forum has published through its Global Competitiveness Report for 2011-2012 (see Figure 1), Cyprus is at the 58<sup>th</sup> place (PwC Report, 2012).

Global Competitiveness Rankings 2012-13					
Rank out of 144	Cyprus	Ireland	Luxembourg	Malta	Singapore
Basic requirements	42	35	8	34	1
Efficiency enhancers	43	25	24	40	1
Innovation & sophistication factors	51	20	19	46	1
<b>Overall ranking</b>	<b>58</b>	<b>27</b>	<b>22</b>	<b>47</b>	<b>2</b>

Source: World Economic Forum, The Global Competitiveness Report 2011-2012

Figure 8 The table in PwC's report regarding the global competitiveness rankings

The same report shows that, even though Cyprus might score better than other countries in some respects, it does not score well as an innovator (PwC Report, 2012) in relation to countries like Malta, Ireland, Luxembourg and Singapore. Cyprus ranks 28<sup>th</sup> out of 141 countries as an innovator (low ranking indicates higher performance).

Statistical data from the Cyprus department of Registrar of Companies and Official Receiver show that there has been a rise in the number of company registrations in Cyprus. Indicatively, there has been a significant increase in the number of registered companies since 2000 – from 96.272 to 227.840 (see Figure 2). Notably, in 2014 there has been a slight decrease in the companies (from 272.157 in 2013 to 251,748 in 2014 and 227.840 in 2015), due to the financial crisis that hit the country in the early 2013.

**REGISTRAR OF COMPANIES AND OFFICIAL RECEIVER**  
**COMPANIES SECTION STATISTICS**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Until 31/01/2016
Registered companies (Total)	96.272	103.577	109.061	115.744	125.361	137.636	155.846	184.133	207.614	221.089	237.372	254.227	269.345	272.157	251.748	227.840	228.637
New registrations	9.362	9.432	8.497	9.080	11.587	14.494	20.280	29.016	24.453	16.101	19.278	19.538	17.999	10.847	11.169	11.270	797
Applications for name approval	28.822	26.310	26.345	28.760	34.219	38.003	49.368	59.285	48.506	38.456	41.734	40.252	36.477	24.430	22.556	24.318	2.064
Certified copies	101.423	102.053	111.349	121.897	154.092	189.933	257.166	344.228	354.996	281.362	301.478	317.177	326.180	308.219	286.552	282.451	23.576
Searches	48.266	46.834	52.246	55.543	55.585	57.393	60.151	57.277	66.275	74.660	78.001	42.537	22.492	10.221	3.341	88.318	6.855
Annual returns/reports	39.007	41.598	46.219	50.115	47.804	34.572	35.032	35.341	37.513	46.763	54.585*	63.462	73.553	68.261	175.734	173.878	14.811
Filing of other documents	48.736	49.539	56.050	58.993	72.412	81.347	115.736	160.684	183.872	124.478	133.237	137.331	136.820	122.336	133.121	149.408	9.425

Figure 9 Statistics of company registrations from 2000 to 2015 (Cyprus department of registrar of companies and official receiver)

This information is important to us, and it is directly related to the EntrInno project; it highlights the need to support the entrepreneurship community, and especially the new entrepreneurs to develop

and enhance their skills and to create and sustain a successful and innovative business. Along this line, of supporting the development of skills for innovation and entrepreneurship, there are a number of organizations, events, institutions, and initiatives which work diligently to provide this type of support and entrepreneurial development. Even though the following examples are valuable for the Cyprus context, the need for further support and new solutions to support innovation and entrepreneurship is strong.

Start-up development is a separate segment and it should be addressed based on its unique characteristics. There is a growth in start-up company registrations. The great advantage is that this type of practice allows innovators and entrepreneurs to kick off a new idea and attempt to pursue it in order to develop it as a business venture. The challenge, however, lies in the fact that we still need to improve the type of training for potential entrepreneurs, the accessibility to financial support for growth, as well as mentorship. For example, through the different start-up challenges and competitions, several ideas/start-ups have won money prizes, which they used for the development of their idea. However, very few of those ideas have managed to survive financially, after the funds had been depleted. One possible reason could be that beyond the particular (financial) support, they did not receive ongoing mentorship from mentors with experience and knowledge. Even though many ideas are innovative, due to the lack of guidance and financial support, they fail. Some of the start-ups continue to sustain themselves by winning more competitions. A few examples of award winning ideas are:

- funifi (<http://www.startupbootcamp.org/alumni/mobility-2013/funifi.html>)
- atyourservice (<https://atyourservice.com.cy/>)
- FOODCLUB (<https://www.foodclub.com.cy/>)
- PollFish ([http://www.cyec.org.cy/?mgt\\_portfolio=pollfish](http://www.cyec.org.cy/?mgt_portfolio=pollfish))
- diyful (<http://www.diyful.com/>)

Several initiatives have started within the last three years that promote, inspire and support innovation and entrepreneurship. Different events, competitions, and associations have been attracting a wide audience of potential entrepreneurs. A description of indicative examples follows:

- **Cypriot Enterprise Link** (<https://www.facebook.com/CypriotEnterpriseLink?ref=ts&fref=ts>): CEL is an organization that organizes different events, projects, etc., to create links between Cypriot entrepreneurs and foreign carriers.
- **Enterprise Europe network – Cyprus** (<http://www.bsccyprus.org.cy/>): The network provides services to Cypriot businesses for reinforcing their competitiveness and innovation in the area.



The network consists of business and research centers, as well as technology institutions and various businesses.

- **Cyprus Association of Research and Innovation Enterprises** (<http://www.cy-research.com/>): CARIE is an association that promotes the interest of Cypriot businesses from different perspectives, such as ethics, legal, social, and financial. The association collaborates with the government and other stakeholders to promote the development of scientific and technological research on businesses.
- **Open Coffee Cyprus** (<https://www.facebook.com/OpenCoffeeCyprus/>): Open coffee is a series of events (mainly presentations), that aims at presenting to the general audience successful stories around innovation and entrepreneurship, technology, and start-ups. The events aim at helping and inspiring existing and potential entrepreneurs to develop their ideas into success.
- **IDEA Program** (<http://www.ideacy.net/idea/>): IDEA stands for Innovate, Develop, Excel, Accomplish, and it is a program for accelerating and incubating innovative ideas around entrepreneurship. The Program is sponsored by several important organizations in Cyprus, such as the Bank of Cyprus, the Cyprus International Institute of Management, MTN, Deloitte Cyprus, etc. The program provides training to accelerate business ideas
- **Government Support for Women's Entrepreneurship** (<http://www.mcit.gov.cy/mcit/mcit.nsf/All/9D974468E3A9FCD6C2257DEB00435DB2?OpenDocument>): The Ministry of Energy, Commerce, Industry and Tourism provides a support plan for women entrepreneurs (ages 18-55), which is co-funded by the EU. The plan aims at supporting and promoting Cypriot women's entrepreneurship in different areas. In particular, financial support is provided to the successful business (according to pre-set criteria). The goal is to promote active entrepreneurship for women of any age.

Other examples have similar nature of work and impact with the aforementioned:

- **Deloitte Innovation and Entrepreneurship Center** ([http://www2.deloitte.com/cy/en/pages/about-deloitte/topics/deloitte-innovation-and-entrepreneurship-centre.html?icid=bottom\\_deloitte-innovation-and-entrepreneurship-centre](http://www2.deloitte.com/cy/en/pages/about-deloitte/topics/deloitte-innovation-and-entrepreneurship-centre.html?icid=bottom_deloitte-innovation-and-entrepreneurship-centre))
- **DIOGENES Business Incubator** (<http://www.diogenes-incubator.com/>)
- **HELIX Business Incubator** (<http://www.helixincubator.com/>)
- **ERMIS Research and Incubator Center –ERIC** ([http://www.talos-rtd.com/en/participations/ermis-research-and-incubator-center-\(eric\)](http://www.talos-rtd.com/en/participations/ermis-research-and-incubator-center-(eric)))



- CHRYSALISLEAP (<http://chrysalisleap.com/>) Tech Accelerator to promote entrepreneurship in Greece and Cyprus
- Cyprus Entrepreneurship Competition (<http://www.cyec.org.cy/>)

Overall, the Republic of Cyprus has developed some advantages vis-a-vis other jurisdictions that can establish Cyprus' economy into an innovative and entrepreneurial hub. These advantages include an accessible and supportive environment, updated legislation that encourages and supports business development including start-ups, education and training relevant to the skills required in the entrepreneurial field, and a well-trained human resources pool. However, there are several areas of the ecosystem that need improvement, such as mentorship, funding and financial support, general business support and specific legal support such as in the area of Intellectual Property Rights.

There are multiple events and several institutions that support innovation and entrepreneurship. Even though innovative business ideas exist, many people do not have the necessary skills to develop, execute and sustain these ideas in the market. This phenomenon is a result of a segmented ecosystem as well as the Cyprus Republic does not have a mature strategic vision for entrepreneurship and innovation. Strategic visioning needs to be evaluated and improved through ongoing feedback loops from all the stakeholders. Skills development and support to the ecosystem needs to be improved.

Also, the financial crisis that has been relentless on the economy the last few years, even though it shows signs of improvement, it can (potentially) be a cause for financial and business development insecurity. The market is not stable enough and many people are hesitant to take investment risks.

The data regarding the Cyprus context indicate that there is a need to move to the next level and start doing things to support innovation and entrepreneurship in practical ways, rather than just theoretical, presentations and recycling of the same knowledge. Enhancing different skills such as decision making, strategic visioning, goal setting, networking and communication, is vital for the survival of a new company and those skills should be taught and nurtured.

It is our opinion that it is necessary to provide practical tasks, through simulated experiences, and with active participation, in order to increase the capabilities of creating and sustaining innovative businesses and to practice entrepreneurship in a productive way.

## Focus Group Results

### Recruitment

CARDET contacted entrepreneurs from its organization's network, who it believed would provide adequate data regarding the state of the art and the needs in relation to the project's demands. Specifically, participants were recruited via emails, phone calls and Facebook messages.



## Overview of Participants

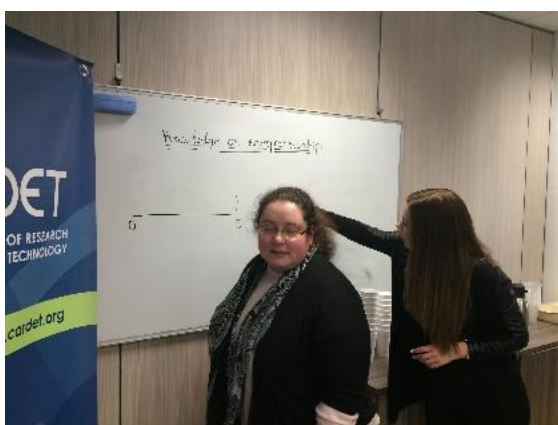
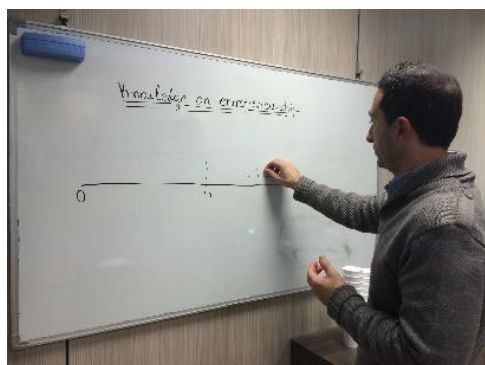
Participants have a variety of backgrounds, which was quite helpful, as they contributed to the discussion from their own perspective. In particular, participants in the target group included a graphic designer, an employer of the European University of Cyprus, a social worker, and two freelancing young adults, all within the range of 18-35 years old.



The stakeholders were also from different backgrounds, a professor of business and finance at the European University of Cyprus, a consultant and manager at the government center for finding jobs for young adults, an entrepreneur and the president of a youth research center. Out of the 6 stakeholders invited, one could not make it and one had to cancel on the last minute. However, CARDET communicated with him, both before the focus group, when CARDET were describing the project, as well as after the focus group, when he provided information about entrepreneurship (as well as some resources of entrepreneurship and technology).

## Format, Setting and Process

The event took place at the CARDET offices on February 3<sup>rd</sup>, 2016. A total of 9 participants (as mentioned above) participated. Demetris Hadjisofocli from INNOVADE was also holding discussions with the members of the stakeholders group. Maria Solomou held the focus group. As per the agenda the meeting started with participant introductions. Maria then presented the project and elaborated on its aims, objectives and the goal of the focus group. The PowerPoint presentation was used throughout the meeting, showing the tasks for each part.



During the second part of the meeting, the knowledge test took place. Participants were given stickers and were asked to place them on a line drawn on the whiteboard, indicating their perception and knowledge about entrepreneurship. The blue stickers were given to the stakeholders and the green stickers were given to the target group participants. It took a few minutes to everyone before they started going towards the whiteboard, as they were processing their thoughts. One mentioned that

he had never thought of placing himself on a line like this at all. And another person pointed out that, entrepreneurship has no limits, it is so open, that it is hard to really position himself on such a scale. Therefore, as shown from the pictures, they placed themselves on the scale from 5 to 10, with around 75% being the most indicated degree of knowledge. This is a quite subjective indication, based on the above comments from the two participants. Right after the knowledge test, participants were separated into two groups and were asked to identify opportunities for innovation, things they consider to be important for a successful business and the reasons why it is worth becoming an entrepreneur.

After a 15-minute break, participants returned to their groups and Maria Solomou described the requirement for the next work in groups. The particular task was about discussing particular questions with their groups and responding to the questions as given to them on paper and in the folder they were given. The two groups also used A2 paper to make notes. The target groups created a visual of the different skills (as asked in one of the questions), while the stakeholders group wrote words.



At the final part of the meeting, participants were asked to complete a diagram to mark important influences on entrepreneurs. The diagram was projected, and participants also had it in their activities block. They preferred to process and mark the influences and skills on the paper, which were later on collected, after the meeting.

**Playing online games:** Not all participants in the two groups are gamers. They know some games, however, they do not play often. Monopoly was mentioned as one game that enhances decision making and can be related to some of the skills for entrepreneurship. Participants reported playing monopoly at random social occasions because it is a game that is played by more than one players. Some of the participants from the target group reported playing the following video games:

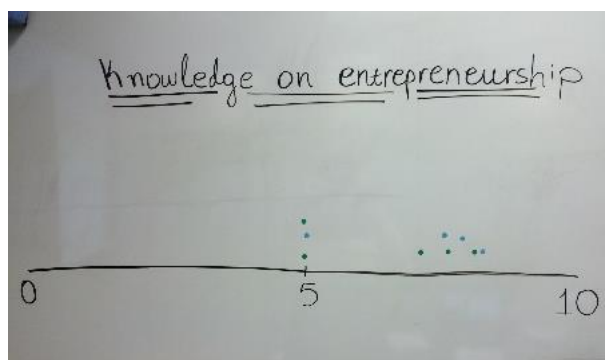
- FIFA
- Sims
- Mind games



## Outcomes of discussions

Below is an overview of the main outcomes from the discussion, based on the questions provided during the focus group to the stakeholders and the participants in the target group.

Participants from both target groups had initially pointed out their knowledge about entrepreneurship, as shown from the picture. It is clear that they mark themselves in the range between 50% and 75-80% on the range.



The discussion began with the participants indicating what the necessary things are for

someone to become an entrepreneur. One of the stakeholders mentioned that vision and a clear concept are two very important things. He also mentioned that the concept needs to be either innovative, or an improved version of something. It is important not to be imitating something else. The example of start-up companies was described; in Cyprus, there are a lot of start-up companies. However, many of them usually stop a while after they are started. This is because, as the stakeholders argued, people do not have the necessary grounds to develop effectively.

**Important skills for entrepreneurship:** A person needs to be thinking strategically and plan accordingly. Another participant mentioned flexibility, also pointing out that it is important to be open, and not work in an individualistic manner. “An entrepreneur is someone who is smart enough to find ways to effectively spend his funds, and to learn from mistakes. In Cyprus, many fear the possibility of failure and persistency; when you fail, to keep going.” One response to this comment was

*“I think network and how you behave are important... When they once asked Cypriots what the best is thing in order to be successful, the response was 87% political protection. I don’t think it is fear. I am more positive. Success is a subjective term because someone might be coming from a rich family, and have all the necessary connections (networking, for his/her business)”*

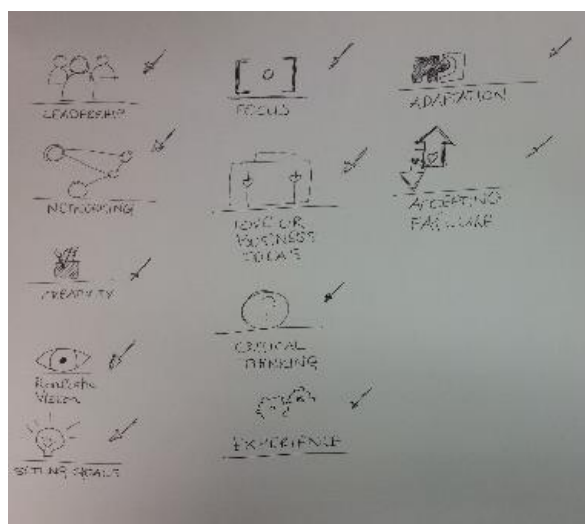
The stakeholders also mentioned the following skills as important for entrepreneurship:

- Networking
- Creativity
- Communication skills
- Leadership

- Realistic goals
- Self-motivation
- Fundraising
- Flexibility, adaptability and openness
- Perseverance
- Discipline
- Strategic thinking (vision)

The members of the target groups mentioned the following skills as important:

- Leadership
- Networking
- Creativity
- Realistic vision
- Setting goals
- Focus
- Love your business
- Critical thinking\Experience
- Adaptation (adaptability)
- Accepting failure



**Skills that people in Cyprus might lack:** The stakeholders identified practical training as something that the Cyprus context is missing. They discussed the fear of failure and that our system does not provide good feeling of financial security and therefore, people are usually afraid of taking risks because they are not adequately equipped with other important skills. They mentioned the following as some skills that need to be enhanced:

- Strategic thinking
- Vision
- Perseverance
- Realistic goals
- Knowledge of market competition so that there can be a social impact within a society

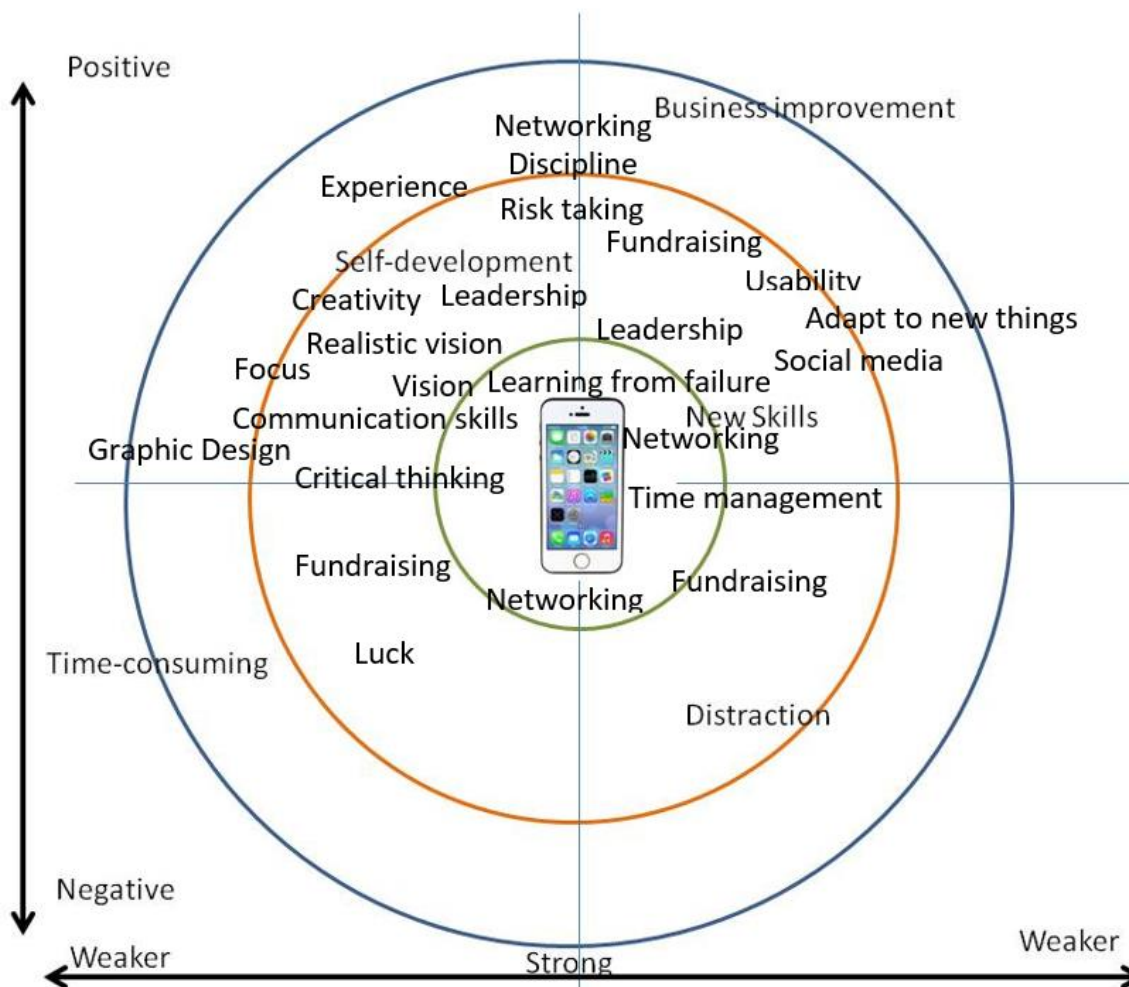
**Training methodologies and known games that support people develop entrepreneurial skills:** The only training methodology mentioned by the stakeholders was through MBA degrees. They did not identify any other types of training that adequately support training around entrepreneurship in Cyprus. They mentioned that there are seminars organized, but they are mainly in the form of presentations, and not practical tasks.

The stakeholders were not aware of any games that support entrepreneurial skills, except from one who mentioned the game “Risks and Rewards” from the Baring Archive in the UK (<http://www.risksandrewards.org.uk/invest/index.php?f=new>).

**Games and their impact on teaching skills:** The stakeholders agreed that online games can be a great medium for teaching and enhancing entrepreneurial skills. They are attractive and they give incentives such as rewards and advancements through point systems. These were agreed by the stakeholders that are basic to be included in a good game for a general audience. One of the stakeholders, who is also a professor at a private university had mentioned that online games are also great for creating communities, for examples within university students, through competitions.

**Diagram:** During the last part of the focus group, participants noted the important influences for an entrepreneur. The facilitator described what the task should be and how participants should think about it. She indicated some influences to provide some examples. Participants also argued that some things that are also skills can be influences as well, such as networking, fundraising and communication. Therefore, they also marked important skills, as they considered them important, to understand in relation to the quadrants.

Participants preferred to process their thinking a bit and so, instead of pointing them on the projected diagram, they wrote them down on the diagrams they had in the folders. The diagrams were collected at the end of the meeting. Some terms are duplicated because they were noted at the particular areas on the diagram by different people.



## Italy

### National State of the Art Report

A dynamic economy requires a greater number of young people who are willing and able to become entrepreneurs.

Starting from this assumption, the Communication from the European Commission called "Entrepreneurship Action Plan 2020" highlights **the role of Entrepreneurship Education (EE) as a key strategy for stimulating economic growth in Europe** and promotes a plan to foster the integration of EE into the European educational systems.

Entrepreneurship education prepares people to be responsible and enterprising individuals. It helps people to develop the skills, knowledge, and attitudes necessary to achieve the goals they set out for themselves. Evidence also shows that people with entrepreneurial education are more employable. Moreover, young people with entrepreneurship education are more likely to set up their own companies.

So far, and with many differences between various countries, existing empirical studies on entrepreneurship do not offer a holistic picture of the actual contribution of education to entrepreneurial human capital or *entrepreneurial talent*.

This is an unsatisfactory outcome, however not surprising. It is due to an inadequate assessment of the context dependent factors shaping the latter.

This is particularly true for ITALY.

It is widely recognized that entrepreneurship plays a pivotal role for economic development at both national and local level and that entrepreneurs are key agents of innovation in market economies. However, recent studies **Italy still fares poorly in entrepreneurial dynamics** compared to other developed countries in Europe. The results show a low share of new high-tech being applied to educational pathways, in every sector.<sup>26</sup>

This is in vivid contrast with the directions of the Europe 2020 programme that aims, as a general target, at knowledge-based innovation and, in particular, at promoting a new entrepreneurial culture across Europe.

There are many features of the Italian economy that may help to identify the type of entrepreneurial environment and the specific role of education as a source of talent.

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<sup>26</sup> "Education and Entrepreneurship in Italy" – F. Ferrante and F. Sabatini – University of Cassino and Lazio, 2015

There are a few interlinked features characterizing the Italian economy, regarding the self-employment rate, the size distribution of firms and their technological and international performance, whose relationship with entrepreneurial selection and performance needs to be closely investigated in the light of claimed context-dependent nature of entrepreneurial talent.

Indeed, these elements together provide an overall consistent profile of a country lagging behind in terms of those entrepreneurial abilities required to compete in complex and turbulent environments. Some context information to start painting the picture of the country situation:

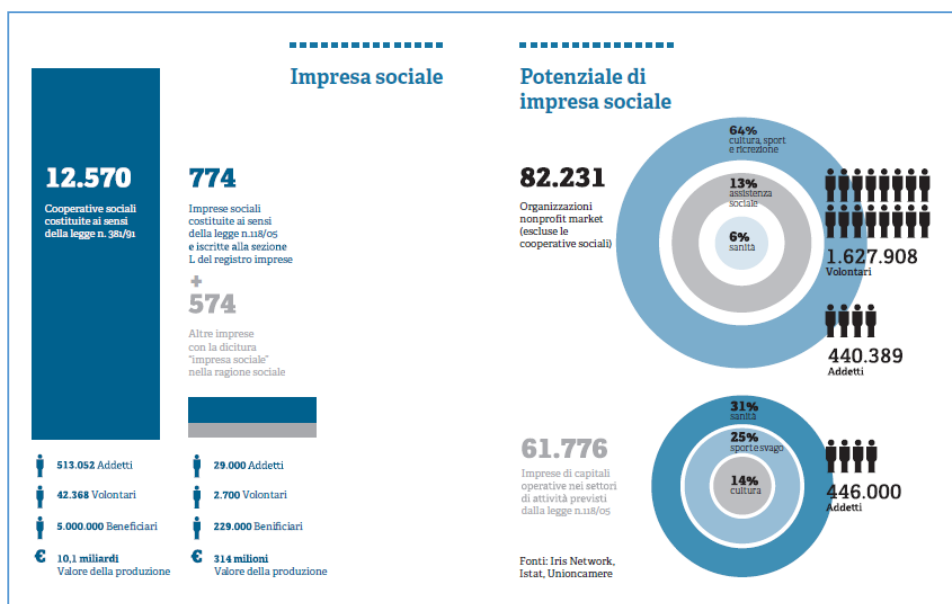
- Involvement and performance of the Italian firms and economy in R&D and science intensive sectors is quite weak (OECD, 2005).
- the high rate of self-employment (27,5%, 2003 and increased), almost twice the European average;
- the small average firm's size: micro firms and small firms are over-represented in the Italian economy, *vis a vis* the European counterparts;
- the Italian firms' specialisation in low and medium technology industries;
- the low firms' degree of foreign involvement through direct investments (with respect to their export propensity).
- Finally, when they enter, the market size of firms is not too small: the problem is that they don't grow in the long run.
- In the recent years the economic crisis and unemployment rate are increasing.

According to most recent data (Istat, 2012) Italy counted more than 200.000 enterprises with more than 5,6 million of employees, with an increase from 2011 of 1,5% but a decrease of employees of 0,9%.

Italian companies are few with big dimension and relevant economic weight and many more of small and very small dimension: only 1,5% of companies have more than 500 workers but they represent the 57,6% of whole sector.

The 75,5% of the enterprises have a simple structure and regarding the sectors the latest surveys say that industry, commerce and finance are more concentrated in the North of the country while agriculture, third sector and other services are more spread all across the country.

Social entrepreneurship this is the scenario as in the last survey.



#### Sectors of activity:

Settori di attività prevalente	Market	Non market	Totale	Market	Non market	Totale
	2011			1999		
Cultura, sport e ricreazione	27,0	73,0	100,0	36,2	63,8	100,0
Istruzione e ricerca	40,8	59,2	100,0	49,9	50,1	100,0
Sanità	50,6	49,4	100,0	50,1	49,9	100,0
Assistenza sociale e protezione civile	43,6	56,4	100,0	49,2	50,8	100,0
Ambiente	29,4	70,6	100,0	28,0	72,0	100,0
Sviluppo economico e coesione sociale	58,0	42,0	100,0	48,9	51,1	100,0
Tutela dei diritti e attività politica	15,1	84,9	100,0	16,1	83,9	100,0
Filantropia e promozione del volontariato	20,0	80,0	100,0	32,6	67,4	100,0
Cooperazione e solidarietà internazionale	26,5	73,5	100,0	31,1	68,9	100,0
Religione	12,3	87,7	100,0	1,1	98,9	100,0
Relazioni sindacali e rappresentanza di interessi	36,3	63,7	100,0	16,0	84,0	100,0
Altre attività	36,5	63,5	100,0	59,4	40,6	100,0
<b>Totale</b>	<b>30,6</b>	<b>69,4</b>	<b>100,0</b>	<b>35,9</b>	<b>64,1</b>	<b>100,0</b>

**Tavola 1.7** Istituzioni market / non market per forma giuridica e settore di attività prevalente (valori percentuali) – Fonte: Istat (2011-1999)

One of the relevant characteristics of social entrepreneurship in Italy is the role it's playing in a period of economic crisis as a **tool of social cohesion**.

Between 2003 and 2012 the number of social entrepreneurs raised from 8.500 to 17.600 with a doubling of workers (+114%) for a total amount of employed people of 474.000 persons in 2013 (the 97% of them working in social services and assistance, training and education).

Ateco		NL	%
P	Istruzione	237	30,6
Q	Sanità e assistenza sociale	210	27,1
R	Attività artistiche, sportive, di intrattenimento e divertimento	64	8,3
N	Noleggio, agenzie di viaggio, servizi di supporto alle imprese	59	7,6
K	Attività finanziarie e assicurative	52	6,7
M	Attività professionali, scientifiche e tecniche	25	3,2
I	Attività dei servizi di alloggio e di ristorazione	24	3,1
C	Attività manifatturiere	17	2,2
F	Costruzioni	15	1,9
S	Altre attività di servizi	15	1,9
J	Servizi di informazione e comunicazione	14	1,8
A	Agricoltura, silvicoltura e pesca	13	1,7
G	Commercio all'ingrosso e al dettaglio; riparazione di autoveicoli e motocicli	13	1,7
H	Trasporto e magazzinaggio	11	1,4
E	Fornitura di acqua: reti fognarie, attività di gestione dei rifiuti e risanamento	2	0,3
L	Attività immobiliari	2	0,3
D	Fornitura di energia elettrica, gas, vapore e aria condizionata	1	0,1
	Totale	774	100,0

In Italy, social entrepreneurs show significant resilience during the economic crisis: in 2013 only 27% of them had a reduction of revenue (while in the other economic sectors this percentage had been of 41%).

Some other indicators of the lacking of entrepreneurship in Italy:

- *Innovation Scoreboard 2014 della EU* considers Italy as a “moderate innovation country” with Croatia, Greece, Hungary, Spain and very far from northern EU countries’ standards.
- *Global Talent Competitiveness Index 2014*, which considers human capital and skills competitiveness, ranks Italy 36 out of 93 countries.
- Lacking of higher training/educational courses based on creativity/innovation and social perspective in entrepreneurship
- Traditional and conservative culture of entrepreneurship in Italy (Small and/or family business).



- Economic crisis, law constraints, unemployment especially for youth

### Education and entrepreneurship in Italy

A new entrepreneurial culture traditionally is formed by incorporating entrepreneurship education in the curricula of official educational programmes and/or developing specific educational pathways in non-formal sector.

Both these educational fields seem to be far from being well advanced in Italy, where there are only few interesting experiences and a huge work still to be done.

### The Formal Education sector

Recent research<sup>27</sup> shows the lowest rate of workers completing university and postgraduate studies among entrepreneurs (about 11.64% for sole traders, 6.43% for active shareholders and partners, and 17 about 4.33% for owners or members of family businesses). Moreover, the attainment of most entrepreneurs is limited to the completion of compulsory education, since respectively 59.64% and 35.62% of owners or members of family businesses and of sole proprietors hold just an elementary or middle school degree.

This trend is confirmed by some data coming from the Eurobarometer report (Flash Eurobarometer, 2009), which shows that there is an equal proportion of EU citizens agreeing and disagreeing that their school education had helped them to develop an entrepreneurial attitude.

In Italy, specifically, Eurobarometer shows a low perception that citizens have about the role of their school education in raising an interest in entrepreneurship and in preparing them to become nascent entrepreneurs.

Most of the studies agree that in Italy, so far, the choice to become an entrepreneur has been negatively correlated with educational attainment. Individuals choosing to become entrepreneurs are, on average, less educated than their employees and it is exactly the opposite situation of other countries (US for example).

This is due probably also to the history and structure of the Italian economy, that is traditionally made up of small-medium family company, whose tradition and attraction is far to be ended.

In the present days in Italy, only some universities offer specific entrepreneurship courses or curricula, mostly within business programmes rather than in science, engineering or social sciences programmes, where the need for them could be greater.

This could limit the diffusion of a wide and multifunctional entrepreneurial culture and ultimately reduce the contribution of new firm formation to the country's economic growth.

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<sup>27</sup> Ibidem

Another recent survey (GEM 2008<sup>28</sup>) shows similar results and confirms: much needs to be done in Italy to foster high-tech and high-job-growth entrepreneurship. The survey gives an idea of the diffusion of entrepreneurship training in Europe and Italy lags behind other countries in this respect. Controlling for many factors, in this research the empirical model tests the probability of becoming an entrepreneur in Italy and it is estimated to be higher than in other countries, but higher education attainment is related to lower probabilities of starting a business. Moreover, specific business education in Italy is shown to negatively affect startup decisions.

Italy shows also the lowest rate of entrepreneurship training for the adult population; compulsory training is the glaring weakness, while the diffusion of voluntary training is closer to that of other EU countries.

Finally, among trained individuals, those with no more than an upper secondary school diploma are over-represented: this may be because people with longer schooling prefer salaried employment and thus do not undergo any form of entrepreneurship training.

### **The Non Formal Education sector**

In Italy, no specific researches or systemized data seem to have been collected on non-formal education in entrepreneurship in the last ten years. The topic needs to be further investigated, since specific training courses promoted by Chambers of Commerce and/or professional organisations and unions, no real systematisation arose during the present research. Neither did relevant experiences of non formal educational pathways and tools seem to exist in entrepreneurship (new entrepreneurs), especially with specific focus on social entrepreneurship.

This is even truer if we consider, in the wide field of non-formal education, the specific topic of Entrinno project: Serious Gaming with educational goal.

Here below I try to focus on some starting points, to develop a further analysis on 5 games already developed and shortly studied in Italy:

- What exists, in this moment, in Italy is not a wide national assessment on the topic but only specific studies and limited experiences within transnational networks and EU-funded projects.

Important seems to be the role of some universities (Milan<sup>29</sup>, Rome, Naples, Padua) which are developing specific activities on training for entrepreneurship through gaming within transnational networks.<sup>30</sup>

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<sup>28</sup> Global Entrepreneurship Monitor

<sup>29</sup> Bocconi University, in Milan, developed the business game "Ice Empire" <http://www.icecreamempire.it/>

<sup>30</sup> "eSG- stimulating entrepreneurship through Serious Games" project funded by LLP Program

These experiences are mainly focused on evaluating the formal educational pathways and recommending for Italy more innovative and European-oriented curricula with entrepreneurial education contents that actually lack almost totally.

In general what seems to be really fostered in Italy is a methodology and consequently a set of educational tools, which include not only technical skills but especially *soft skills*, those transferrable competences, which are fundamental to create an effective business.<sup>31</sup>

- Such skills need to be developed and fostered through innovative tools, on this all existing literature in Italy seem to agree. And the assumption is that students learn up to 10 times better when engaged in simulations and gaming, so this fields needs to be more and more explored in the coming years.
- In Italy serious gaming is developed within some big companies as a tool for human resources management or customer management (Ferrero, Original Marines, etc.). They are much less aimed at schools/universities or non formal institutions.

## Focus group

### Recruitment

People recruited for the focus group had been called by phone one by one, and selected amongst the wide local network of young people active in the associations, PMIs, schools already networked with CSV MARCHE and contacting a list of relevant stakeholders already working on digital devices development (for schools for example), young start ups, cooperatives and other social entrepreneurs.

### Overview of Participants

**10 persons** participated in the focus group, held in Ancona on February 4<sup>th</sup> from 4PM to 7 PM.

Participants were 4 young persons and 6 stakeholders.

Young persons: Laura Mosca (35), Valentina de Felice (33), Chiara Costantini(33), Dawid Weglarz (20).

Stakeholders: Tommaso Sorichetti (PUNTODOCK Cooperative – active in social innovation projects and facilitation of urban networking); Raffaele Giorgetti (GIOCOM – communication and web development company), Emilio Bucchi (Club TiCentro, training for entrepreneurship centre), Luca Ferroni (BeFair -

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<sup>31</sup> The reference model in these projects is the one proposed by Heinonen & Poikkijoki (2006) which identify 4 steps in entrepreneurial process: from the born of idea (*intention*) until its realization (*exploitation of opportunity*), passing through a research phase (*opportunity search and discovery*) and a decision making phase (*decision to exploit opportunità*).

free software developer), Elisa Mazzieri (Talent Srl – informatics for schools) Luca Giulianelli (Mondo Solidale fair trade cooperative),

### Format, Setting and Process

The focus group had been realized in Ancona at CSV MARCHE headquarter, in the meeting room. It had been settled as indicated in the Focus Group guidelines and it started on time (4:00 pm). All participants arrived on time.

The focus group guidelines have been developed by Valeria Bochi (main facilitator) and Gianluca Frattani (second facilitators taking minutes) with the following agenda:

- Presentation of CSV MARCHE and Focus Group Objectives
- Presentation of the project EntrInno (origins, goals, action plan, expectations)
- Round of participants presentations
- Knowledge test
- First round of discussion (topics: entrepreneurship, skills, situation in Italy)
- Coffee break
- Second round of discussion (topics: learning through games, online gaming).
- Closing of the focus group
- Recording of 2 video interviews

No pictures of participants have been taken, only of the room setting and the final brainstorming outputs. Additionally, two video interviews have been recorded at the end of the focus group.

Considering the limited number of participants, which were not easy to reach (besides the great effort taken in recruitment), we decided not to separate them into two groups but to develop a group discussion on the above mentioned questions also in order to save time and make a deep exchange of points of view among participants.

### Outcomes of discussions

The discussion has been very wide and fruitful. After the round table presentation and the knowledge test, which showed a good level of confidence with the topic of entrepreneurship, the facilitators started animating the discussion following the groups of questions proposed in the Guideline.

Here below some of the major findings of the common discussion:

## RELEVANCE OF THE TOPIC:

All participants agreed that the situation regarding entrepreneurship in Italy is really far from being at the same level of development, self-confidence and law support than in the North of Europe. And this has been underlined during the whole discussion as the main constraint and limit of national situation. One of the participants can mention an Italian professional game developed with goals similar to the EntrInno project and it is “IceCreamEmpire” developed for adult learners by University Bocconi.

The idea of the project is very interesting for all participants because all of them recognize video gamers as a part of the population really committed with their passion and working on this very receptive to learn through gaming. The more the games have different kinds of contents (also video, documents etc.) the more it is attractive for young people.

## WHO’S AN ENTREPRENEUR? WHO’S A SOCIAL ENTREPRENEUR?

Basically all participants agree on the fact that a good business, a good entrepreneur is a person who develops something around his **passions** and desire. No good enterprise can come from a non-passionate attitude.

And a good business starts as well from an **idea** which must be the base of any further plan. The idea is not something static, it needs to be flexible, to grow and change according to the context and opportunities.

To be a social entrepreneur something more is needed, basically the availability to be open to the community’s needs, not only the ones that make your business run, and to be able to develop the business acting as part of something wider.

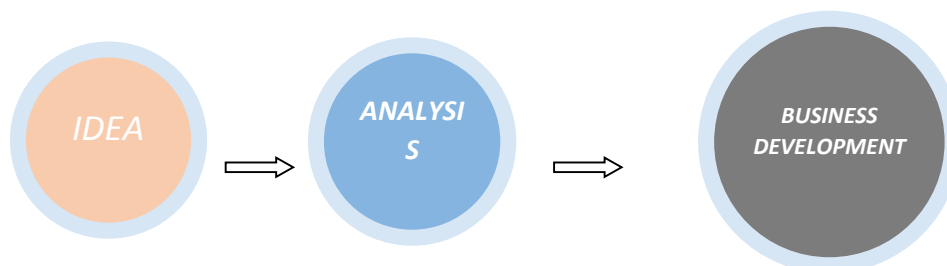
## WHICH SKILLS ARE NEEDED?

The formal system in Italy is good but it is focused only on the technical part of the competences needed to become a good entrepreneur. Other training courses promoted by different actors are very heterogeneous and all the participants agree on the fact that some skills cannot be taught and rely more on personal attitudes (leadership, empathy, etc.). In general, the so called transferrable skills are to be considered the most important, as they are the most difficult ones to develop and most determining in the development of a business, especially if it is a social business.

One of the participants suggests to include in the training path the issue of emotional intelligence, for example recalling the experience of Six Seconds (<http://www.6seconds.org/>) which works for the development of tools and test to support such learning processes.

Participants are not confident that these skills can be learned as such. Not everyone can become an entrepreneur, and forcing in this direction is a big mistake. In fact, in Italy the law somehow forces a young person to create immediately an enterprise to receive funds for start up even if he/she's not ready, and this structure soon can become a limit and a prison.

The game should start from the recognition of own passions and preferences, and develop the business starting from that



Another skill considered fundamental is the attitude to make connections, to work with an interdisciplinary approach and the game should foster this element through the using of “unforeseen”, the possibility to go back to scenes and levels, to change decisions and find multiple solutions. This could be done also through the “conditioning interaction” among players (the example is the game SIMCITY [http://www.simcity.com/en\\_GB](http://www.simcity.com/en_GB)).

#### **THE SITUATION IN ITALY:**

Italy is in a deep economic crisis, and it shows elements of cultural and legislative incapability that was for participants, the most relevant problem for beginners. The Italian society is getting old and the welfare system, educational structure, law, and credit priorities seem to be tailored to the older generation and not the youngest one.

Starting a business always (especially in economic crisis) requires flexibility, short term liquidity, low bureaucracy and support from institutions. All these elements in Italy are far from being ready and proactive for new entrepreneurs, in spite of political declarations and the European Commission's recommendations.

One of participants, an experienced entrepreneur, says that if he was young now, he would have left the country and started his business somewhere else. The young person's reply that all of them thought that once, at least, but at the end they want to do something in their country.



To summarize the present situation for young people in Italy, all participants agree that up until the 1990s a graduate has faced his/her entrance in the job world without fears or doubts, feeling his/her life as their parents, something clear and sure as a long line.

Now, the context is different and people graduating now face more difficulties in the job market and decisions are not as straight forward as they have been in their parents' generation. This awareness is hard to face for the Italian youth, also because they are used to live in families with very protective environments. That's why one of the most important skills to be learnt is, in participants' opinion, RESILIENCE.

## Lithuania

### National State of the Art Report

In Lithuania, entrepreneurship has been fostered for several years through the support of government initiatives and European Union support. This explains why in Lithuania there are a lot of organisations that are involved in providing general services for start-ups and promoting entrepreneurship as a possible career option<sup>1</sup>. There are also a lot of organisations that particularly work in entrepreneurship promotion for youth as youth unemployment is a common problem in the European Union, as well in Lithuania. According to the Global Entrepreneurship Monitor statistics<sup>2</sup> – young people in Lithuania are more active in entrepreneurship than most in EU countries. The general conclusion of GEM's<sup>2</sup> recent report about Lithuania is: *“Lithuania has high levels of intrapreneurs (employees engaged in entrepreneurial activity). People are confident in their own abilities to start a business; however, they are slightly less positive about the opportunities available to do so. Their creativity is constrained by fear of failure”*. The main statistics of Lithuania provided in GEM are:

- Total early-stage Entrepreneurial Activity: 11.3%
- Established Business Ownership: 7.8%
- Perceived Opportunities: 32%
- Perceived Capabilities: 33%
- Entrepreneurial Intention: 20%
- Fear of Failure: 45%

In Lithuania there are 7 business incubators. The main purpose of such organisations is to support young entrepreneurs, to promote creation of new jobs, to reduce businesses risk and help companies with good business ideas but low financial capacity, to reach a level where they can independently engage in economic and commercial activities and to compete in the market. Business incubators are renting premises & equipment in favourable terms; provide business information, consultation and training services.

In Lithuania there are 11 Science and Technology parks. Usually these parks are a physical place, where companies settle in and carry out research and other innovative activities. Parks provide added value services such as business incubation, consultancy and technology transfer. They seek to increase the welfare of society based on a culture of innovation and increasing competitiveness of business institutions.



In Lithuania there are 34 business information centres that provide business information and advisory services; organizes trainings, information dissemination activities and entrepreneurship promotion campaigns; mediates in finding business partners in Lithuania and abroad also carry out business registration procedures; helps in preparing business plans, other documentation; and advises about the EU Structural Funds.

There are 3 Innovation centres that provide consultations, trainings, various projects, helps in finding partners, helps in knowledge and innovation transfer to business.

In Lithuania there are 5 Chambers of commerce in biggest cities - Vilnius, Kaunas, Klaipėda, Šiauliai, Panevėžys. The aim of these organisations is to represent the interests of its members and provide them with needed services.

As mentioned earlier, in Lithuania, entrepreneurship especially for youth has various supporting initiatives that come first of all from The European Union funded projects and from The Ministry of Economy funded projects. For small business start-ups, there is an opportunity to get concessional loans from INVEGA. Kaunas Municipality is also providing a yearly financial program for start-ups. Also, the platform, [enterpriselithuania.com](http://enterpriselithuania.com), can be used to find all the necessary information about support in starting, developing business or exporting. However, it was mentioned in SUPPORTING YOUTH ENTREPRENEURSHIP IN LITHUANIA A REVIEW OF POLICIES AND PROGRAMMES report<sup>3</sup> that *“youth entrepreneurs would benefit from a wider variety of sources of start-up financing but given the size of the country, a higher priority should be given to providing more support to youth after start-up”*.

As entrepreneurship is becoming increasingly popular, there has also been a lot of contests for young entrepreneurs:

- Creative Shock – global social business case competition;
- „Verslauk!“ – national business plan contest, encouraging young people to start business;
- Young Entrepreneur Competition by Lithuanian Innovative Vocational Education Institutions Association;
- Verslogenijus.lt , verslovirusas.lt– for schoolchildren;
- Projects:
  - “BZN Start”;
  - “Creazone” and many more funded by European Union.

NGOs:

- European Innovation Center ([www.einc.lt](http://www.einc.lt))
- Panevėžys Business Advisory Centre (<http://www.pvkc.lt/>)
- Verslumo skatinimo akademija (<http://www.verslumoskatinimas.lt/>)

Some organisations are giving more attention to entrepreneurship promotion for women:

- SIF – takes action in mentoring, consulting, toolbox platform creation;
- Kaunas Women employment centre;
- „Išmani moteris“;
- Women’s activity centre in Marijampole county (<http://marmvc.webs.com>);
- Kretinga women’s information and training centre (<http://www.kmimc.lt>);
- Jurbarkas women information and employment centre.

Over the past couple of years, the interest in business has been tremendous. For instance, "Enterprise Lithuania" organized an event on entrepreneurship<sup>4</sup> last fall which garnered 46 thousand direct or online visitors.

In the previous year, The Social Security and The Labour ministry together with the OECD was involved in projects on youth entrepreneurship<sup>5</sup>. The main objective of the projects was to promote youth entrepreneurship at the national level, to assess existing programs and policies and to make recommendations on how to use the European Social Fund to support young people starting their own business (as previously mentioned in this report). According to the report<sup>3</sup> by the EBPO project experts, the evaluation of entrepreneurship education is positive in Lithuania and it was recommended that most students get entrepreneurship education. The experts mentioned that “entrepreneurship education is mandatory for young students <...> Students receive an introduction to entrepreneurship so that they can develop a positive attitude towards entrepreneurship and have opportunities to gain practical skills through experience”. Nevertheless, the experts identified some issues with youth entrepreneurship as there is no one unified policy making organisation that is responsible for youth entrepreneurship. Even though Lithuania is proud to be “one of the first EU countries to develop entrepreneurship education strategies at the school level”, the main recommendation is to strengthen entrepreneurship in higher education.

Training services available for business start-ups.

Lithuanian Labour Exchange (LLE) has 10 territorial labour exchange offices in all regions of Lithuania. LLE offer support for jobseekers and business start-ups, giving them the opportunity to acquire the necessary skills to compete and succeed in the labour market. ([www.ldb.lt/en/](http://www.ldb.lt/en/))

#### Online courses:

- <http://www.verslokursai.lt/>;
- <http://www.visasverslas.lt/portal/categories/4/verslo-mokymo-kursai>
- [ekursai.epilietis.eu](http://ekursai.epilietis.eu)
- [kamane.lt](http://kamane.lt)
- [e-mentoring.eu](http://e-mentoring.eu)
- [job-yes.eu/](http://job-yes.eu/) (development soft skills for entrepreneurship)

Some problems might arise while different organisations try to implement their activities. Another issue that was raised in the report<sup>4</sup> is the situation differences in the two biggest cities and in rural areas. While in these two cities the situation is great and there are many opportunities for young people, conversely in rural areas it is a problem and low support is given. The Minister of Economy, E. Gustas, also noticed<sup>6</sup> the problem that the entrepreneurship situation is lacking behind biggest cities, but sees some opportunity- as long as the European Union structural funds focuses on increasing the competitiveness and development of small and medium-sized enterprises that are most in the regions, it will also help to address regional employment and social problems. The Lithuanian Central Credit Union this year made a map showing entrepreneurship level in different areas and it was evident that leaders are found in the biggest cities and seaside resorts<sup>7</sup>. In one study, the author<sup>8</sup> reveals factors that hinders doing business in three rural cross-border regions of Lithuania bordering on Kaliningrad Region and Poland which are: “high taxes, an unfavourable social-economic situation in the region, the lack of support from the state, the lack of the necessary infrastructure, the emerging impediments for the start and development of a new business, and a shortage of sustainable development resources in the region. The Minister of Economy, E. Gustas, claims<sup>6</sup> that due to supporting programs, rural areas will increase exporting production and by 2020 even 40 % of exporting products will come from rural areas and the entrepreneurship level will reach the average Lithuanian level. Exports are important for Lithuanian business, as Danske Bank analyst for Baltic States Rokas Grajauskas claims<sup>9</sup> that the Lithuanian economy is both small and open and business depends on foreign markets. For instance, exports account for almost 90% of the GDP. The Danske Bank analyst also noted that Lithuanians should affirm the products that are made in Lithuania rather than hiding them under foreign labels.

The Minister<sup>6</sup> noted that in the last 8 years was a lot being achieved in entrepreneurship especially amongst the youth– arguing that based on the statistics, more Lithuanians between the age of 20-24

compared to Estonian, German, Danish, Finnish or Swedish youth would be willing to start their own business in coming 3 years.

In the report<sup>3</sup> experts claim that there are several main barriers for entrepreneurship amongst young people in Lithuania:

- Role models.
- Lack of skills
- Lack of experience
- Lack of developed networks:
- Market barriers.

Entrepreneur and, „Dreamdoland“ project coordinator Karolis Pigaga claims<sup>4</sup> that the main problem that hinders people from starting their own business is the fear of taking responsibility, because people in Lithuania have too many stereotypes from the past which includes the occupation that took more than fifty years.

As for policy – it is complex in Lithuania. There are several ministries and agencies that are responsible for youth entrepreneurship and even though a lot has been done, coordination between these different organisations as was mentioned – might be an issue. As it is stated in report<sup>3</sup> - non-government organisations have a strong role in delivering youth entrepreneurship policy.

Lithuanian Free Market Institute use their own methodology<sup>10</sup> for calculating entrepreneurship index – it is determined by the number of operators active per thousands of populations. In Lithuania it is - 31.83. However, the situation might be totally different when looking at the ones who are working independently (self-employed), because it is 69.

In another index- the global study on entrepreneurship “AGER 2015” (Amway Global Entrepreneurship Report)<sup>11</sup> based on of 44 countries, which is calculated based on three different dimensions: human desire to become an entrepreneur, options available in the country to start a business and opinions about social pressure not to do it, Lithuania is ranked third of having a culture of entrepreneurship in Europe and eleventh in the world. For six years in a row, the survey revealed that 83% of Lithuanians positively look at entrepreneurship, but only 44% of Lithuanian respondents identified Lithuania as a friendly country for entrepreneurs. One of the most important factors is that a positive attitude towards entrepreneurship remains constant almost across all age groups and for a long time of research. Although there are many who want to start a business, only several take real steps to do it. Fear of starting their own businesses is felt even by 64% of Lithuanian respondents. Most are afraid of: the financial difficulties and bankruptcy (40 %.), economic crisis a threats (20%), legal

consequences (18%). A recommendation for policy makers in one article<sup>12</sup> might solve this problem – for different government institutions to come with a unified strategy how to develop entrepreneurship generally from pre-school, schools, of higher education institutions and even in workplaces.

## Focus group

### Recruitment

First of all, SIF had a discussion with the team responsible for the Enterino project in Social Innovation Fund and decided who to invite from our contact list to this focus group research event. After that SIF made an invitation letter and send it to all of them and called them personally for several days. One of the contacts provided assistance to SIF and invited two colleagues that are teachers in one Kaunas University of Applied Engineering Sciences.

Later Kaunas University of Technology School of Economics and Business provided opportunity to present project for 11 participants – mainly lecturers, professors. Everyone was interested in project idea and was eager to use final product of the project – game in their teaching activities. So SIF asked them to invite students to participate in the focus group.

### Overview of Participants

5 students from the School of Economics and Business participated in focus group as respondents from the target group. In general, students that were participating in the focus group evaluated their experience with entrepreneurship and running their own business as weak, even though one had experience in trading and other had 5 years of work experience in marketing department and third – working with business clients, providing bank loans. They claimed that are a little bit familiar with entrepreneurship. They thought that entrepreneurship requires acquiring funds through some kind of self-organised activities, is modern and requires both soft and hard skills. There were 3 teachers-lecturers in focus group research as stakeholders' representatives: 2 from Kaunas University of Applied Engineering Sciences that work in entrepreneurship field in their everyday work and 1 from Kaunas University of Technology that also has own business. 1 participant was from higher education school association (involved in various projects and group work with career and entrepreneurship for adults; and 1 from Women Employment Centre that works for 20 years with women entrepreneurs.

### Format, Setting and Process

The focus group in Lithuania was conducted in Social Innovation Fund premises – Kaunas, Savanorių ave. 1. Date of event – 2016.01.13. The event started at 17:00. Several participants were late for 15 minutes, due to difficult weather conditions, but everyone commonly decided to wait for them (started signing in the list and in Consent form).

There were 10 participants in total.

The event was held in the national Lithuanian language.

The agenda was as following the focus group guidelines – everyone agreed on rules and timing.

Overall, the event went smoothly; participants were personally motivated to engage in discussions because they were either interested in gaming as teaching possibility or they were interested in such project (representatives of stakeholders group) and students were interested in getting new knowledge how to start business and they were really tech-savvy.

### Outcomes of discussions

Discussions about the perception of entrepreneurship during the focus group event were: idea, creativity, business, money. Some respondents from the shareholders group felt that it is associated with laws and cost. Students expressed more positive words such as leader, fun, exiting, even international relations.



Both groups agreed that having an idea is most important thing for successful business. Students also saw that passion, knowledge, practice and experience is needed. One student noted that the most important are the ones that create value for employees. Students commonly agreed that trainings (which develop certain skills for being an entrepreneur) are needed, but some of them claim to

not have enough time. Respondents from stakeholders group did agree with the importance of having a great idea and that inner entrepreneurship characteristics are needed, but they gave more attention to the environment such as appropriate laws, conditions and financing which according to them is needed for a successful business. One even claimed that the reduction of bureaucracy is needed here in Lithuania.

Money for stakeholders seems to be the most common thing for choosing to become an entrepreneur. They also think that being an entrepreneur allows you to plan your time; as you are your own boss, it gives self-esteem feeling and opportunities for new activities. A group of students saw opportunities that come from entrepreneurship – achieving more than working for others, taking care of the family by making your own decisions and also that income depends on your own.

While discussing about abilities and skills that are most important for entrepreneurship these were mostly mentioned by students' respondents: creativity, innovations, optimism, and passion. They also claimed that the ability to manage risk, human resources (finding talents, using innovative hiring methods) are important. Almost all respondents from stakeholder group believe that young people have needed skills to become entrepreneurs, although one believed that they lack motivation. They often mentioned during the discussion that communication skills of young people must be improved. One stated that young people have to be more persistent and develop team building skills. Another claimed that formal training from school is needed and the one that is given now is not enough; they should be more talented on combining knowledge and understanding markets. Career planning was stated by one of the respondent from stakeholders group as a skill that is a "must" for young people.



As was mentioned in participants' overview, all 5 students felt that they have skills to be entrepreneurial which they gained through in work experience and in practise.

For improving skills, students use books and information on the internet and they also try to develop personal learning by attending seminars or other events related with entrepreneurship mainly offered by university.

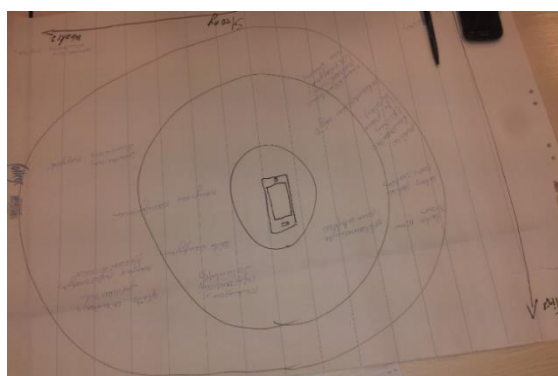
The most common method on how to develop such skills mentioned by respondents from the stakeholders group were: mentoring, team working, solving real case problems and workshops. They commonly agreed that online games could be useful in teaching entrepreneurship skills, they claimed it helps to develop logical thinking, get faster reaction while taking decisions and furthers learning. One mentioned: "Online games guide how to react to real life situations". 3 of the stakeholder respondents in focus groups knew of two games: "Kietas riešutas" and "Eco-Sim Adam"; while one of them knew of only the first one. Stakeholder respondents in the focus group agreed that online games have benefits over face to face learning and that the learning method is flexible. One claimed that



there might be more materials and best practise examples online to choose from than in face to face learning.



Stakeholders would like to see real life cases in such games. Examples of good practice are; that such game would be visually attractive, would teach people how to gather teams for business, and be more visible in mass media so that more people would know about them.



One respondent from the stakeholder group stubbornly claimed that there is totally no support for potential entrepreneurs in Lithuania and finally some agreed that even though there are European Union funds that support entrepreneurship – Lithuanians are not able to use them all or to use it effectively and that there is lack of support from government and in general support is limited. This might have affected the discussion about current

state of entrepreneurship among young people in Lithuania as respondents from the stakeholders group claimed that there is lack of laws, support from positive taxation, lack of information from various organisations that are involved in fostering entrepreneurship and motivation from young people to take action or if there is such – government bureaucracy destroys all plans. Even though some mentioned that there is support from EU funds.

All 5 students say they have a personal computer, smart phone and tablet. But only 2 of them claim that they use interactive online tools for developing entrepreneurial skills – through social media (Facebook).

Student respondents claim they do not play Video or Online games.

Other student respondents have applications on their phone; One - Pixwords and the other has Candy Crush Saga. The ones that don't have any claim they don't have time for them.

Only two student respondents know games related to entrepreneurship – one was playing “Hard nut” in university and other knows one simulation game for project managers that might be also associated with developing some skills that are also important for entrepreneurship.





All 5 student respondents agreed that games could be used to develop entrepreneurial skills. One claimed that playing “Hard nut” proves it; while others say games are attractive for young people, is innovative and is a creative way of how to gain skills.

Only 2 of student respondents think that they could use games for developing entrepreneurial skills, the other 3 say that they won’t use it because it looks too complicated, they do not play them, or they think that there are other convenient ways to learn and develop entrepreneurial skills as games take time.

## National State of the Art Report The Malta National Reform Programme

From the National Reform Programme (NRP) of Malta 2015

*The Government is also committed to continue strengthening job creation and flexibility in working arrangements through the promotion of apprenticeship and entrepreneurship*

*Schemes, continuation of labour activation programmes, supported and sheltered employment training for disadvantaged groups, extension of the Youth Guarantee Programme to youngsters on social assistance benefits, and reduction in income tax for unemployed women who are over 40 years of age. Government is also offering tax deduction as an incentive to employers to hire persons between 45 and 65 years who have been unemployed.*

The 2015 edition of the NRP revealed the following information:

### Labour force

Over a span of ten years starting from 2005, the activity rate increased by 8.7 percentage points. The most significant contribution to this increase was the presence of more females on the labour market. Female work activity rate increased from 36.4 per cent in 2005 to 52.1 per cent in 2014. The age bracket with the highest changes was the 25-54 group with an increase of 13.1 percentage points between 2005 and 2014. When comparing national figures with EU28 averages, it can be noted that activity rates are lower than the national values for the younger segment of the population (15-24) whereas as age increases, EU28 averages tend to be higher than Malta's values.

### Education

The rate of early school leavers (ESL) dropped by 12.6 percentage points between 2005 and 2014. Though females have had the lower rates throughout the whole time series, the highest drop in ESL rates was recorded among males. Although Malta's levels for this indicator declined over the reference period, national values are still higher when compared to European averages.

Labour Force Survey estimates indicate that over the past decade more persons in the 25-64 age brackets are participating in lifelong learning with levels reaching 7.1 per cent in 2014. The EU28 average for 2014 stood at 10.7 per cent. Of the persons aged 30-34 years having achieved tertiary level, a constant increase was recorded over the period of ten years, from 17.6 per cent in 2005 to 26.6 per cent in 2014.

### Employment

The behaviour of employment and activity rates among different age groups is quite similar. The share of employment in services sector increased during the period under review, with the rate rising by 11.7 percentage points over the past decade. The share of self-employment has kept the same levels between 2005 and 2014 whereas the share of part-time employees has increased by 7.2 percentage points over the same period. Fixed-term contract employment has also increased by 3.4 percentage points over the past decade.

### Unemployment

The national unemployment rate in 2014 stood at 5.9 per cent as against the EU28 average of 10.2 per cent. Over a span of ten years, the youth unemployment ratio dropped from 8.6 per cent to 6.2 per cent, whereas a further decrease was also estimated in the long-term unemployment rate with levels reaching 2.8 per cent in 2014.

The Labour Force Survey divides the 15+ age group into three exclusive groups - employed, unemployed and inactive. The following table show the latest statistics for the period Q4 2014 to Q3 2015<sup>32</sup>:

	Q4 2014 (%)	Q1 2015 (%)	Q2 2015 (%)	Q3 2015 (%)
Employed	50.3	50.6	51.3	52.5
Unemployed	3.1	3.1	2.9	2.9
Inactive	46.6	46.3	45.8	44.6
Total	100	100	100	100

<sup>32</sup> Source: <http://www.nso.gov.mt>

## Educational Policies

The Learning Outcomes Framework (LOF)<sup>33</sup>, published in 2015 allows for flexibility in teaching and learning programmes in order to address specific needs and to build upon strengths within the context of the learning communities in different colleges and schools. This concept of flexibility is promoted throughout the entire framework. While acknowledging that out-of-school factors such as poverty and social exclusion affect learner achievement, the LOF seeks to improve learners' learning experiences by encouraging creativity, critical literacy, entrepreneurship and innovation at all levels. This will allow learners to reach their potential by connecting what they have learnt to their individual contexts. Consequently, this will help learners develop a positive attitude towards learning and a greater appreciation of its usefulness.

The move from a prescriptive content-based curriculum towards a learning outcomes approach will impact all programmes in schools and all external examinations and assessment at the end of compulsory education in Malta.

The LOF was also designed to meet the four broad education goals outlined in the Education Strategy for Malta 2014 namely to:

- reduce the gaps in educational outcomes between boys and girls and between students attending different schools, decrease the number of low achievers, raise the bar in literacy, numeracy and science and technology competence and increase student achievement.
- support educational achievement of children at-risk-of-poverty and from low socio-economic status and reduce the relatively high incidence of early school-leavers.
- increase participation in lifelong learning and adult learning.
- raise levels of learner retention and attainment in further, vocational and tertiary education and training.

## Analysis of the Focus Groups

The first focus group was held on Friday 12th February 2016, between 3 and 5:30 pm. This focus group was attended by the stakeholders. Kopin also organised a second focus group on Monday 14th March 2016 between 9:00 am and 10:30 am for young adults attending the Malta College of Arts, Science and Technology (MCAST).

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<sup>33</sup> Source: <http://www.schoolslearningoutcomes.edu.mt/>. The Learning Outcomes Framework is meant to be part of the National Minimum Curriculum for compulsory education (until age 16). This should form the basis of much needed skills later on in life.

## Stakeholders' Focus Group

Kopin went through an internal brainstorming exercise to identify important stakeholders for this focus group. The following entities were identified: Malta College of Arts, Science and Technology (MCAST), University of Malta, St Martin's Institute, GRTU, Malta Gaming Authority, Chamber of Commerce, Young Enterprise, Take Off Business Incubator, Lead Training, Malta Cooperative Federation, Malta Igaming Seminar. Contact persons from these entities were identified and invited to participate through an email. Kopin received a positive reply from the following entities: MCAST, Malta Cooperative Federation, Young Enterprise, and GRTU. In the meantime, Kopin had invited the National Youth Agency and a Social Cooperative to attend.

Seven participants, including two facilitators, took part in the focus group. Two of the members were members of the academic staff of the Malta College of Arts, Science and Technology, the Director for Innovation & Entrepreneurship and the Director for the Institute of Information & Communication Technology; another participant was a Youth



Worker from the National Youth Agency; a founding member of a social cooperative; and the CEO of the Malta Cooperative Federation (MCF). The two facilitators were from Kopin.

The meeting started with the participants introducing themselves followed by an introduction of Kopin and the EntrInno project.

Then the facilitator asked the participants to share their understanding of entrepreneurship. It was interesting to note that the participants shared different notions of entrepreneurship. While most of the participants took the financial / economy perspective, the Youth Worker, shared his experience of youths who show entrepreneurial spirit, albeit, for the wrong reasons. He referred to young persons conning the system for personal gain! Possibly the most interesting aspect of this part of the discussion was when the 3 tier approach was explained by the Director for Entrepreneurship at MCAST: learning about entrepreneurship, learning for entrepreneurship and learning through entrepreneurship.

Although there was a heated discussion, all agreed that the issue is a multi-faceted one and that more needs to be done in order for young people to show more spirit of entrepreneurship in Malta.

The focus group also discussed the issue of the skills needed for a person to become entrepreneurial. Some of the skills mentioned include the need to be creative, the ability to problem solve, to be innovative, and to manage risk. Another aspect mentioned was the fear of failure. This is where online

games can be beneficial because the fear of failure can be eliminated completely since this is a virtual scenario.

When the group was asked for their personal reaction to entrepreneurship and to describe this along a 10 unit line, interestingly, most of the participants (4) placed themselves on the middle of the line and one placed himself on point 9. The person who placed himself on point 9 comes from the Coop sector and understandably people forming cooperatives need to be entrepreneurial. The others were somehow more tentative.



### **The most important thing for entrepreneurship is /are.....**

For the participants, the most important aspects for entrepreneurship are creativity, perseverance and have no fear of failure. With regards to entrepreneurship education, this needs to engage the students. Another participant mentioned the need for brains and the correct aptitude for such a career. One participant emphasised the ability to be at the right place and at the right time and to grasp the opportunity.

### **Why is it worth becoming an entrepreneur?**

One participant mentioned wealth, while another emphasised the idea of being your own boss. An interesting comment was “having control over your work-life balance”. Another participant referred to the fact that it decreases unemployment and if one is good at it, then, one can make a lot of money.

### **What do you think is the current state of entrepreneurship amongst young people in your country? Is there a lot of interest and knowledge in enterprise?**

The participants were divided on this question. One mentioned that locals put a lot of importance on job security. Another mentioned that young people in Malta are entrepreneurial if necessary – “necessity is the mother of all inventions”. Another participant noted that there is interest but very little knowledge.

### **What support is available to potential entrepreneurs?**

One participant, coming from MCAST, described the initiatives taken by MCAST in this field. Apart from the Curriculum aspect, at MCAST established the MCAST Entrepreneurship Centre. The Centre is assisting students and alumni through various forms including hand holding and mentoring to

transform their innovative ideas into successful and sustainable business ventures. Another participant said that the support is very poor. He mentioned that the MCF offers a free service in helping to form Cooperatives. The Youth Worker present for the focus group mentioned that entrepreneurship education is given importance in the field of Youth Work.

**Do you feel that young people have the entrepreneurial skills that they need to be successful in the business world (either to set up their own business or work for someone else)?**

There was general agreement on this question: No, young people do not have the skills to be successful in the business world. One participant mentioned that a number of educational institutions are developing an element of embedded learning in the courses they provide.

**Are you aware of any online games that can support people to develop entrepreneurial skills? If so which?**

Some of the participants mentioned *Mine craft*, *Strategy games* and *Problem Solving games*. Others were not familiar with any. One mentioned the classic Lemonade game. He said that this game stimulates the creation of such skills. Other games like monopoly for example are now available online. It is pertinent to note however the difficulty with the proposal to gamify entrepreneurial experience since all experiences in life are different and the same thing may mean and have a different impact on different persons. Another participant mentioned Football Manager, Age of Empires, Farmville, and City Ville.

**Do you think that online games could be successful in teaching these skills? Discuss the reasons why/why not.**

Not all participants are involved in education so there was little discussion about this question. One participant pointed out that there is a need to differentiate between teaching the theory behind entrepreneurship and the real life skills to become successful.

Another participant mentioned that games can be successful as they engage youths however it is important to continue to stimulate curiosity of "what's next".

**What would you like to see in a new game designed to develop entrepreneurial skills?**

An interesting facet of the discussion focused on the transfer of skills. The participants agreed that the skills to be transferred are done in an indirect way. One participant emphasised that the game should not be marketed as the App that will teach you entrepreneurial skills. The game needs to mask the skills within the activity; otherwise no one will be interested to install the app.

Another participant listed what he considers as important characteristics of the game. These include a game which people enjoy, something that engages youths and make them play repeatedly. Other characteristics include a competitive edge with scores and comparison with other players; the game needs to focus on real life situations.

Since the discussion took more time than anticipated, the facilitators decided with the participants that the evaluation was to be done through email.

The questions set for the evaluation were:

1. How did you find the focus group?
2. What could have been done better / differently?
3. What did you like most about the focus group?

4 participants answered the questions sent. They all agreed that it was an interesting experience. They suggested that the agenda could have been sent beforehand in order for better preparation. One participant mentioned the absence of a female participant in the group. The facilitators agree that this was a limitation on the focus group. All participants agreed that the networking aspect of the focus group turned out to be an important highlight. Some even asked whether this can result in concrete collaboration in the future.

### **The Young Adults' Group**

Thirteen young adults participated in this focus group. The group was facilitated by the same facilitators of the previous group. The methodology used in this group was different. The facilitators introduced the organisation (Kopin) and the project. The consent form was explained and the group was divided into three sub-groups. This was done in order to obtain more information since it was felt that it would be easier for the young people to participate in smaller groups rather than in one large group.

Each group was asked to discuss 10 questions.

The first two questions focused on the knowledge of the participants about entrepreneurship. All participants showed a medium to high level of knowledge about entrepreneurship. The participants were asked to write two or three words which come to mind when reflecting about entrepreneurship.

The young adults said that entrepreneurship entails an element of risk-taking with determination and sacrifice (personal traits); they also mentioned the issue of start-up capital (finances); organisational



skills, such as a business plan, management, budgeting, time planning and innovation were also mentioned. These are important elements of any entrepreneurial enterprise.

The third question focused on what they think is the most important aspect for entrepreneurship. The young adults' responses can be divided into two groups: personal characteristics – creativity, determination, motivation, sacrifice, focused, passionate, realization of dreams; and organisational characteristics – identification of potential investments, time-management, and communication strategy.

When the young adults discussed what they consider important to become a successful entrepreneur, they mentioned courage, imagination (innovation), leadership skills, listening and communication skills, willingness to ask for help and guidance, stable finances, setting goals and targets and having a good business plan.

Question 5 dealt with why is it worth becoming entrepreneur. Their answers focused on the financial aspects – specifically mentioning greater profits for their work if they are successful; the sense of achievement and satisfaction in being your own boss, independent and having a dynamic work routine; and the opportunity to create something.

The following two questions, question 6 and question 7, dealt with entrepreneurial skills. The skills mentioned by the young adults were similar to ones mentioned previously: time-management, leadership, planning, team-work, communication, listening skills, creativity, being an extrovert and imagination. In question 7 they were asked to choose the most important three - time-management, communication, and leadership. Interestingly, they ignored the issue of capital or the skill to obtain the finances needed to start an enterprise.

Question 8 asked the participants whether they consider themselves to have these skills, how they developed these skills and whether they were taught these skills. They used their own experience from their students' lives to explain that some of the skills were learnt through their assignments. However, a group insisted that some skills cannot be taught but developed through their socialisation process and interaction with others.

Question 9 asked the participants to mention some online games which deal with entrepreneurship. Many of the participants were not aware, or possibly did not make the connection. Others mentioned Monopoly, Theme Hotel and Swords and Portions.

All participants agreed that these games can be used to develop entrepreneurial skills. They said that such games can be considered as good practise to develop these skills.

The last part of the focus group focused on the issue of the young adults' initiative to be entrepreneurial.

The participants said that the educational background plays an important part of the persons' decision to set up his/her own business. The issue of the start-up capital was also mentioned as an obstacle. They also agreed that many young adults are over protected by their parents and thus show risk averseness. They are more inclined to opt for a salaried job than create their own work. Some participants mentioned the lack of opportunities for support for start-ups; sometimes the information about these opportunities reaches young people when it is too late.

The facilitators mentioned the issue of setting up cooperatives to offset the problem of start-up capital. The participants did not show a lot of enthusiasm for this and immediately mentioned the problems and challenges arising from forming partnerships.

### Conclusion

The major conclusions from the two focus groups are as follows:

1. Entrepreneurship does not happen automatically. It needs a stimulating environment for young people to take the initiative and create work, and wealth, for themselves and others.
2. Lack of knowledge is a major stumbling block - possibly educational initiatives can solve this situation.
3. Willingness to work hard as a psychological strength is a pre-requisite for successful ventures.
4. A person does not have to be successful on his/ her own but can share the success with others.

## Poland

### Entrepreneurship in PL

According to statistical data presented by the Central Statistical Office (CSO) in cyclical study "Aktywność ekonomiczna ludności Polski" (eng. "Labour force survey in Poland") in the first quarter of 2015 the total number of self-employed reached 2,870,000 people. Compared to the total number of employees, which were 15,837,000, self-employed people accounted for slightly more than 18%.

Figure 10 shows the number of self-employed people in Poland in 2010-2015 (data for the first quarter of each year). The number of employees decreased in 2013 by almost 200,000 (decrease by 5.18%). A slight increase was noted in 2015, but the amount was still lower than in 2013. It should be regarded as an alarming signal coming from the labour market.

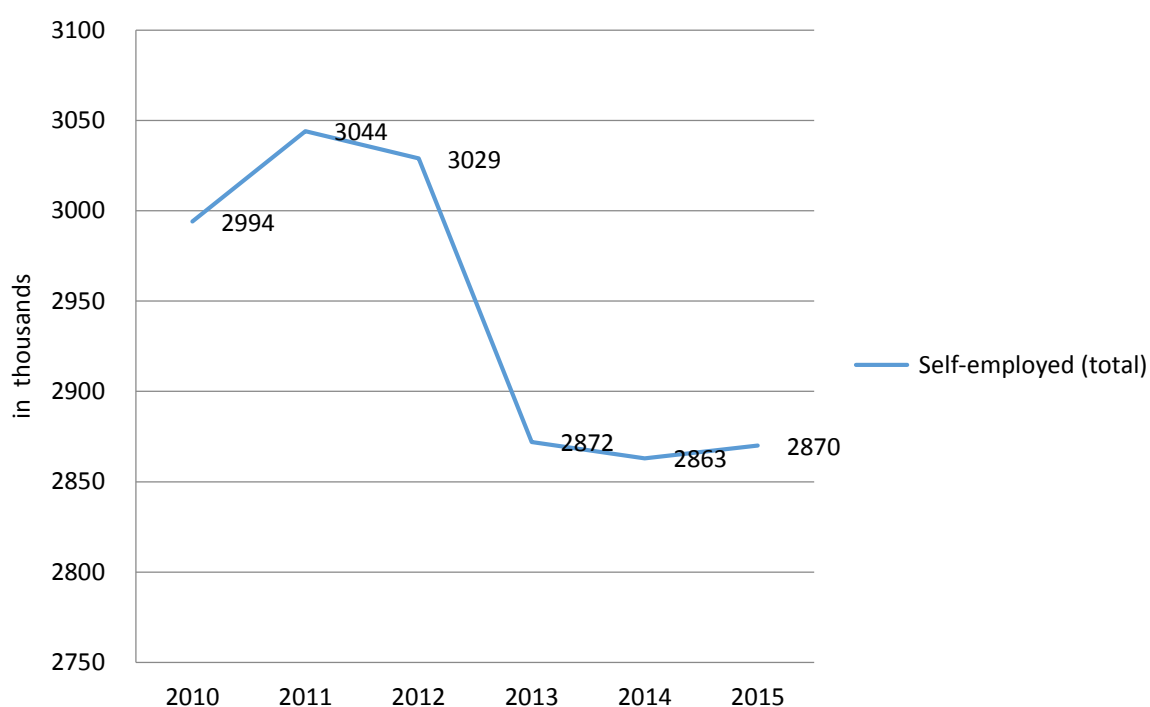


Figure 10 The number of self-employed people in Poland in 2010-2015 (data for the first quarter of each year)<sup>34</sup>

Similarly, the **number of people running their own businesses and employing others** has been falling steadily for the last six years. The number of such people in 2010 amounted to more than 683,000. However, two years later, it fell by more than 40 thousand. This trend continued since that time, except 2014, in which an increase of almost 20 thousand of employers was noted. In the last year for

<sup>34</sup> *Labour force survey in Poland [Aktywność ekonomiczna ludności Polski]* (data for the first quarter of each year), Central Statistical Office, Warsaw, Poland 2010-2015.

which figures are available, the number of people employed was the lowest in the entire six-year period of analysis and was just over 616 thousand people (Figure 11).

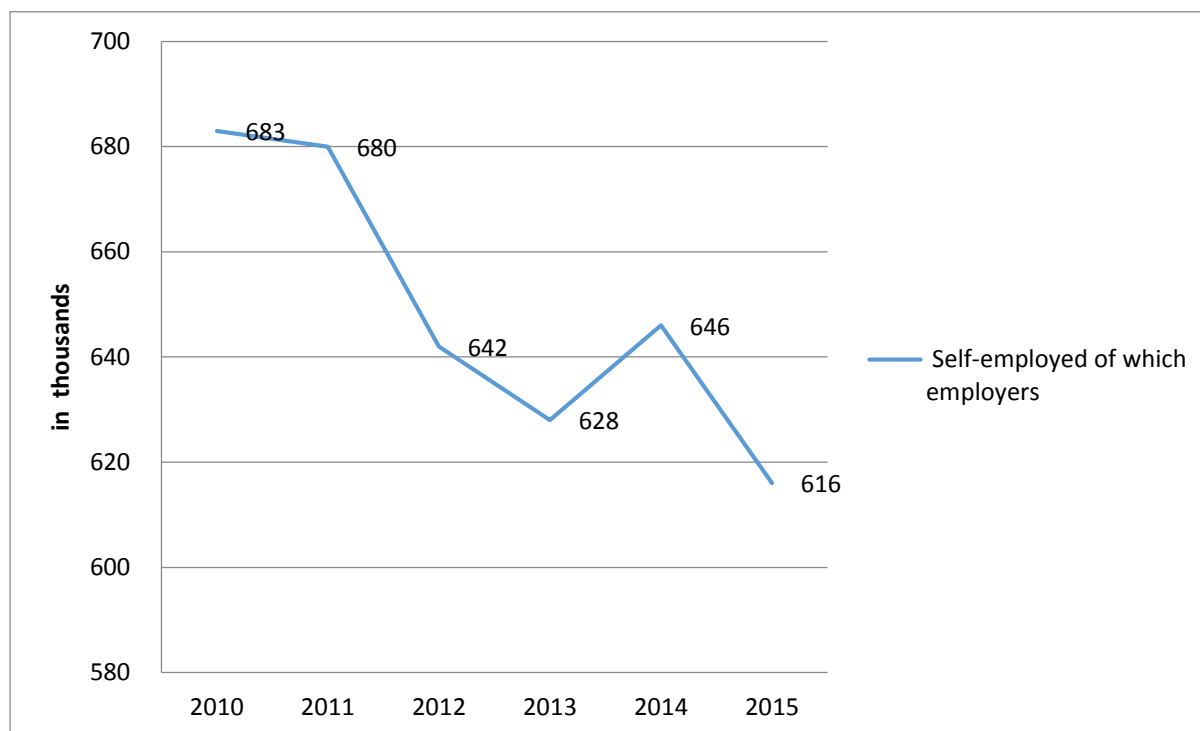


Figure 11 The number of people running their own businesses and employing others in Poland in 2010-2015 (data for the first quarter of each year)<sup>35</sup>

A decrease in the **number of young people running their own businesses**, has also been noted in the last six year period. CSO data for 2015 indicate that in the age group 20-24 the number of self-employed people fell by a quarter compared to 2010. In the age group 25-29 years, the decrease was 17%, while in the group of 30-34 years, the amount was 1 percentage point more (Figure 12).

The number of **young people running their own business activity and in addition also being employers** declined in the last six years. The exception was the age group 25-29 years, which in 2015 saw an increase in numbers approaching to the level of 2012. In the other groups, the number of young employers in 2015 reached the lowest recorded level (Figure 13).

<sup>35</sup> *Labour force survey in Poland [Aktywność ekonomiczna ludności Polski]* (data for the first quarter of each year), Central Statistical Office, Warsaw, Poland 2010-2015.

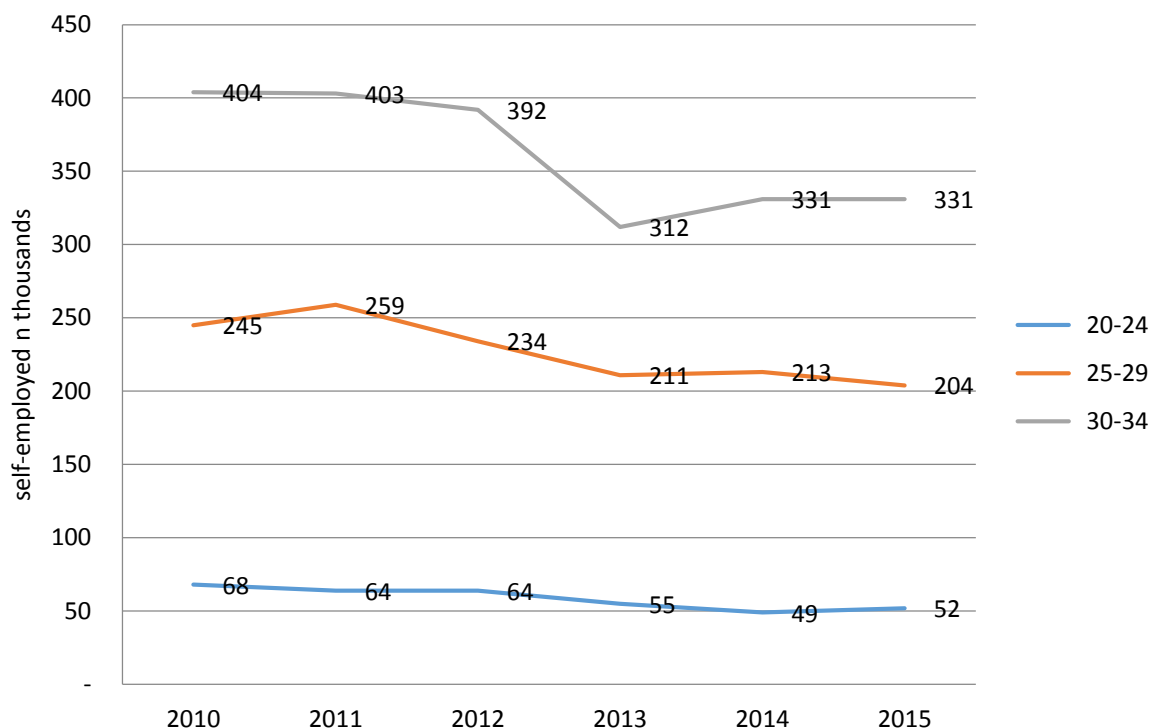


Figure 12 The number of self-employed people in Poland in 2010-2015 in selected age groups (data for the first quarter of each year)<sup>36</sup>

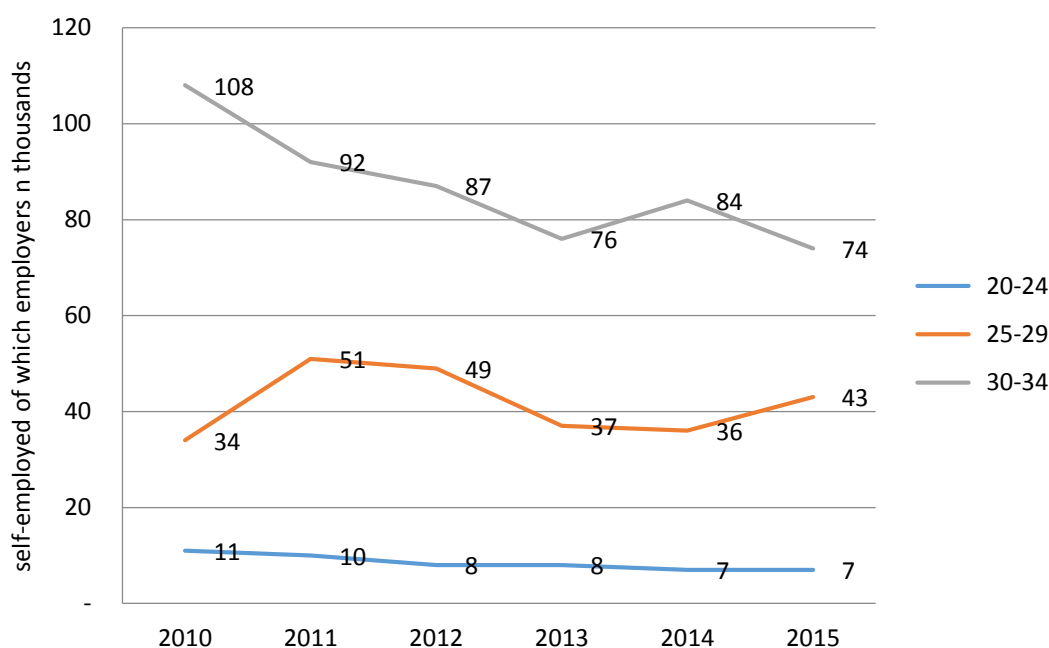


Figure 13 The number of young people running their own business activity and in addition also being employers in Poland in 2010-2015 in selected age groups (data for the first quarter of each year)<sup>37</sup>

<sup>36</sup> Labour force survey in Poland [Aktywność ekonomiczna ludności Polski] (data for the first quarter of each year), Central Statistical Office, Warsaw, Poland 2010-2015.

<sup>37</sup> Labour force survey in Poland [Aktywność ekonomiczna ludności Polski] (data for the first quarter of each year), Central Statistical Office, Warsaw, Poland 2010-2015.

Young people setting up their own business in Poland are driven by different motives. Among the most frequently indicated are [Cichocki, 2011]: lack of job opportunities in the profession, the opportunity to work for themselves, no boss, no restrictions, the possibility of practical verification of their knowledge, the ability to take risks, achieving income, satisfaction with the business, the opportunity to succeed. Similar conclusions were presented also by Piecuch T. (2013), who indicates that young people are driven by, among others:

- the profit motive, as they want to get financial resources for maintenance, or to become independent of their parents,
- the desire to prove others (friends, family) that despite their young age (little and often no experience in this regard) they can successfully run their own company,
- predispositions and knowledge (including that acquired during studies) that can be used while working "on their own",
- life necessity, lack of appropriate qualifications, lack of well-paid jobs, and even the lack of any prospects for employment,
- an idea for a business, so unique and innovative that it can ensure the functioning and future development of the company,
- an example of colleagues or members of his own family who have run their own businesses, and who manage to run a business and keep their businesses on the market,
- the need for independence, of being "their own boss"
- the need for self-realization, development of knowledge, their abilities, skills.

According to the same research, **the main barriers to young people starting their own business** can be divided into internal and external. The first includes inter alia: lack of a good business idea, lack of experience in this type of activity, fear of bankruptcy and loss of assets, lack of confidence and fear of what is associated with running a business, too much responsibility for themselves and others. External conditions include, inter alia: lack of adequate amounts of capital, too much bureaucracy, very large market saturation and strong competition between companies, high risk business, economic crisis.

**Education in entrepreneurship in Poland** is an obligatory subject in secondary schools, which is unprecedented in Europe. Entrepreneurship education is also implemented in schools at lower levels (primary and lower secondary), but as an optional subject based on proprietary curricula. The core curriculum for secondary schools covers realization of lessons in six thematic blocks: entrepreneurial skills, features and functions of the market, market institutions, the state and the economy, business and labour market.

In the context of higher education, the subject associated with entrepreneurship does not have legitimacy within the framework of the programme, however, it may be available in the educational offer of the university as an optional subject (does not apply to business majors, which is part of the curriculum). In September 2015 the Ministry of Science and Higher Education in Poland published "Program rozwoju szkolnictwa wyższego i nauki na lata 2015 – 2030" (eng. "The Programme for the development of higher education and science for the years 2015-2030"). In this document, the authors noted a need for closer cooperation of enterprises with the science sector, however, it does not refer at all to the issue of education in the field of entrepreneurship among students. This document indicates only an academic entrepreneurship education without specifying the exact conditions of its development.

As T. Piecuch indicates in the already cited position (2013), entrepreneurship education is a necessity, but it must be carried out in a more practical way. Implementation of educational programmes at their present shape can lead to passive attitude in lieu of activity and creativity of young people: "Schools of various levels put too little emphasis on education for entrepreneurship, which is conducive to learning useful skills in teamwork, creative problem-solving, self-presentation." The same author points out elsewhere that: "with regard to students, graduates should take the actions to activate them and encourage them to start their own businesses and employ others. Unfortunately, Polish universities do not prepare adequately their graduates to take their business after graduation". Among the methods proposed to use in the field of entrepreneurship education are mentioned, among others, (Banerski, Gryzik, Matusiak, Mażewska, Stawarz, 2009 [in:] Piecuch, 2013):

- realization of small group projects that take into account real data,
- stimulating the students to work out their own unconventional ways to implement the tasks posed before them using a variety of techniques, including digital games,
- emphasis on independent, logical and creative thinking.

The mere **use of digital games in the teaching of entrepreneurship** depends on access to them. Frequently in Poland, education is conducted in this way only within dedicated projects financed from external funds. Most of these initiatives, despite many advantages, are not maintained on the market longer, because of the lack of commercial infrastructure allowing them to finance their improvement after a period of preparation and release on the market of the first version (usually funded from the project). It implies that these initiatives disappear from websites and are not available long-term.

A key role in economic education with the use of a wide range of digital tools plays the Polish National Bank (being Polish central bank). On its website [www.nbpportal.pl](http://www.nbpportal.pl) there are eight digital games dedicated to children and youth of all ages, that aim to teach them various issues of economics and

how to manage an enterprise. [This portal is the main free-access online portal where educational games on entrepreneurship are placed - selected examples are discussed in the Appendix].

Interesting initiatives in the use of games include two games developed by "Centrum Kompetencji Grupa Szkoleniowo-Doradcza Sp. Jawna" and its partners. These games teach business management to use a variety of investment strategies. Somewhat different is the game called "Przedsiębiorczość" (eng. "Entrepreneurship"), in which the participant must face all the realities of running a business in Poland. Interesting graphics, taking into account all aspects of legal and realistic about the challenges are the strengths of this game.

## Focus Group Results

### Recruitment

In the process of recruiting the members of the focus group (experts), current informal contacts of Danmar Computers employees were used, and the process covered phone calls, meetings, etc. (they were all informal so there is no documentation).

Students (young adults, potential entrepreneurs) were invited by university staff from Rzeszów and Tarnów. Lecturers from these two universities invited their students, who admitted planning their own business. They were invited during informal conversation (no documentation).

### Overview of Participants

In the focus group there were two experts, lecturers on the Faculty of Management on Rzeszów University of Technology, teaching subjects connected with entrepreneurship. Their cooperation with Danmar Computers, started with international projects aimed at supporting entrepreneurship (Beyond Diversity and Badge project). One of them is a co-author of numerous studies and science publications, in the field of entrepreneurship support, resulting from various EU projects implemented by Danmar Computers, and the reviewer of substantial documents relating to this subject. Their interest in the Entrinno project, resulted from a desire to expand their practical knowledge on educational techniques and the willingness to confront their didactic experience gained at foreign universities during internships. Experts were informed about the project through personal contact with Danmar Computers employees. The other experts were also experienced in business, there were trainers, freelancer, coaches and entrepreneurs.





## Format, Setting and Process

The meeting started at 2 pm., all the participants were on time (5 experts and 6 students). They were given name tabs and all the working tools required. After greetings and brief introductions, the coach, chairing the meeting, explained the project, the rules, and the expected outcomes of the meeting. The participants were informed that all the meeting would be voice recorded. Next the knowledge test on the subject of entrepreneurship was held, where participants rated their current knowledge on the subject. The next part was a group discussion, the participants were divided into two groups, and these groups were separated, after 25 minutes of work, the groups were reunited, and their responses were shared and discussed. After the coffee break, the participants were separated again, and were given different sets of questions, posed to find out their attitudes, beliefs and opinions about this subject. Next there was a diagram, intended to uncover the key influences of online games.



Participants were given flip chart sheets, with a mobile phone representing online games in the middle, and were asked to list all the important influences on entrepreneurs, with the strongest written in the inner circle and the weaker further out. At the end of the meeting two participants were asked to give a video testimonial, on which the opinions about activities and thoughts on project outcomes were shared.

## Outcomes of discussions

Give an overview of the main outcomes of the discussions, based on the questions provided above. Please try and use this section to include any **good quotations from participants** (!) or follow-up actions needed to be completed e.g. registering to join the platform, emailing for more information or in the case of Education and Training organisations, asking about further cooperation.

## Experts in the field of entrepreneurship

### **What is the current state of entrepreneurship among young people in Poland?**

Young people face many obstacles on the way to start their own business. Research shows, that many young people, though willing to become entrepreneurs, do not start their own businesses. Instead they choose safety, which means that they prefer a full time job. Those led by passion, start their businesses, no matter how difficult it is, as they are determined to make it their source of income. However, there are divergences in research, because most of the respondents would prefer a job in big corporations (which is a synonym of success). Only a small percent of these employees, declared a willingness to become self-employed.

### **Are there any interests in entrepreneurship and what is the level of knowledge on this subject?**

The interest in entrepreneurship is high, but the knowledge on this subject is not significant. A large percentage of businesses run by young people fail. Students are eager to learn entrepreneurship but putting this knowledge into practice doesn't look that well. They do not start businesses and are not willing to do so. The level of education plays a key role here; the higher it is, the less interests in entrepreneurship (considered to be hard work). Passionate students however, are interested in business incubators, where they can start their business safely.



### **What are the possible forms of support for potential entrepreneurs?**

The most popular are:

- academic business incubator,
- grants for starting a business (e.g. from labour offices ),
- trainings,
- counselling support within the National System of Services,
- EU projects offering grants,
- some of the Science and Technology Parks and Special Economic Zones offering support in starting a business.

### **Do you think that young people have entrepreneurial skills, needed to succeed in business (starting their own business)? or maybe they prefer employment (working for somebody)?**

The skills are dependent on the level of education. People with higher education more often feel a need to secure their living, and they more often require counsellors or mentors' support. Passionate people tend to learn more independently. In the case of people who are willing to start a business, there is a need for mentor support that would teach young people practical aspects of doing business - they would get advice from someone who succeeded. An example of such support would be entrepreneurs' clubs in the Netherlands, where successful entrepreneurs teach young people how to start their own business.

### **What particular skills should young people develop? Which of them are the most important? (flipchart)**

First of all these should be soft skills. Young people do not recognise the importance of these kind of skills. They don't feel the need to learn assertiveness or empathy ("what for?" attitude). They are not interested in these skills. We cannot learn social skills on our own, and nothing will substitute for face-to-face contact. Young people seem to be afraid of interpersonal relations and that is clearly the area, which needs improvement. Entrepreneurship requires interaction, even if it's a one-man business. Young people are also not too persistent, as they can be characterised by their attitude "I have to do something and become successful". Digital world separates them from other people. Alternative reality is just a substitute of real contacts (this concerns communicating via social media). Young people also lack strategic thinking, as they are focused on "here and now", and it is not possible to develop a business without having a vision of its future progress. Young people are no more creative and courageous than those middle-aged or older. In many cases this is a result of mistakes in education or being raised in very comfortable and stress-free conditions.

### **Which skills are missing most?**

The top missing skills are some soft skills, mentioned before, that are:

- assertiveness,
- empathy,
- communication and relations with other people,
- persistence,
- creativeness,
- courage,
- strategic thinking.

### **What contents should entrepreneurship courses have to develop abovementioned skills?**

The contents of the courses aimed at developing entrepreneurial skills, apart from theory and the component developing entrepreneurial attitude (e.g. strategic thinking, planning, decision-making or financial management), should be in large, focused on strengthening soft skills.

### **What training methods are most often used to develop these skills?**

Methods most often used to develop these skills are interactive workshops, or gamification. Additionally, these forms of activities can be supported by online activity.

### **Do you know any online games that can help people to develop these skills? If YES, what are they?**



In some of the online games, entrepreneurship attitudes can be developed. The examples are games offered by National Bank of Poland (NBP) or Warsaw Stock Exchange (GPW). Apart from that there are „Piekarz Przemo”, „Przedsiębiorczość” or „Headmaster” and world famous „Market Place”.

**Do you think that online games can be effective in teaching these skills? Why YES? / Why NO?**

For the purpose of developing entrepreneurial attitudes, games are evidently a good tool, because this attitude is possible to obtain, based on specific set of decisions, that a user can make (games base on certain algorithms, which enable learning and transferring knowledge to the real world). In the case of soft skills, this is not necessarily because of no real interaction (abovementioned deficiencies in communicating and establishing emotional relations with other people).

**What are the advantages of learning online over face-to-face learning?**

Online learning means limitation of costs in terms of place, time and teachers. It is also more accessible. You can use it every time, everywhere. The effects of such learning are also immediate (e.g. material covered, completed exercises, outcomes, etc.).

**What elements should be included in a game teaching entrepreneurship?**

New game should offer the possibility of verifying acquired skills, at any given moment, so that it is clear what has and has not been acquired. Moreover, the game should closely imitate to reality, including financial reality as well. There should be a possibility of introducing live data (e.g. interests rates, legal situation, etc.).

Young adults group (potential entrepreneurs)

**Are you familiar with the term “entrepreneurship”?**

Yes, it is a set of features enabling the right use of available resources, in order to accomplish set goals.

**Who is “an entrepreneur”?**

It is a person with the abovementioned set of features.

**What skills should every entrepreneur have? (flipchart)**

Openness, creativity, independence, self-reliance, willingness to take risk, intelligence, innovativeness, persistence, diligence, courage, flexibility.

**Which of them are the most important one?**

Self-reliance, courage, innovativeness, creativity, willingness to take risks.

**Do you think you have these skills?**

“I have some of them, I’m constantly working on the rest. Entrepreneurship can be developed through various activities.”

**Have you been taught these skills at school/university?**

These skills can be developed through group work, brainstorming, presentations, workshops, creating business plans.

**In what ways can you now improve (develop) your skills? (take part in trainings, do distance courses, watch educational videos in the Internet, etc.)**

“We can develop our skills using different means like for example trainings, the Internet, educational videos, workshops, conferences, traineeships, practice or partial studies. We can also get help from academic business incubators that offer counselling on business issues.”

**Have you got a laptop, smartphone, tablet or other device with the access to the Internet? What is it?**

“Yes, I own all of these devices with access to the Internet.”

**Do you use interactive online tools to develop your entrepreneurial skills?**

Most of the participants do not use any interactive tools to develop their entrepreneurial skills.

**Do you play online or video games?**

Most of the participants play video games occasionally.

**Have you got any game apps on your smartphone?**

“I haven’t got any game apps on my phone, I believe they are useful, but very time-consuming.”

**Do you know any games on the subject of entrepreneurship?**

One example emerged during the discussion: FARMERSI

**Do you think that games can be used to develop entrepreneurial skills?**

One of the comments from a participant as follows: “Yes, I do believe that games can be used to develop entrepreneurial skills, in fact I think they are very good method. Using online games, we can develop entrepreneurial skills and attitude. Thanks to that activity, we can learn how to make good decisions, without assuming real consequences (e.g. financial). Through online games, we have a chance to check/test skills learned at school.”

**Are you currently playing a game that aims at developing entrepreneurial skills?**

Most of the participants believed that using entrepreneurial games is time consuming and therefore they don't play them

Using the completed evaluation forms from participants; please give an overview of their opinion on the project and event. It is important to mention any suggestions for improvements or recommendations in relation to the EntrInno project.



## National State of the Art Report

According to data from the Global Entrepreneurship Monitor and the European Commission Romania is the first country in the European Union in terms of entrepreneurial intentions, 27% of Romanian saying they would start off on their own. The percentage is more than double the average in the European Union.

However, problems arise when we look at the sustainability of entrepreneurial initiatives. Romania ranks 6th in the EU (after Austria, Estonia, Latvia, the Netherlands and Slovakia) in terms of entrepreneurial activity. A total of 9% of the working population is in the process of starting a business or developing their own start-ups. We occupy the penultimate place in Europe but in terms of sustainability entrepreneurship: more than half of newly created companies fail to survive the critical period of 42 months (they close or suspend their work).

### Factors influencing entrepreneurship ecosystem development

#### *1. Characteristics contractor*

Entrepreneurs share a common set of features that help them start their own businesses and increase their chances of success. These include leadership skills, ability to work, the independence desired risk tolerance or degree of responsibility and they want to take. Romanians are not prepared in this regard and feel the need to develop these characteristics through educational programmes.

#### *2. Access to finance*

A big problem is the lack of Romanian entrepreneurial ecosystem access to finance. Although 48% of Romanians want to set off on their own more than half of them say they do not have the financial resources necessary to do so. Fears of insufficient funds are added and the related inability to return the debt. These problems diminish with increasing age, when entrepreneurs realize that there are many financing options available in Romania and abroad.

#### *3. Taxes and other administrative barriers*

Fees and administrative barriers are a major impediment to the development of entrepreneurial activity in a region. Regardless of age, respondents are unanimously agreed that the level of fees and taxes is high, and corruption and inefficiency in the existing public institutions have a negative impact on their business development possibilities.

#### *4. The existence of networks and connections*

In Romania, citizens develop strong entrepreneurial communities in large cities, but they are not yet sufficiently present. Young people also accuse the lack of mentors and business connections relevant

to them. There were significant differences by age: the network of contacts of a person increases significantly with age, which brings business and new connections and support they need from mentors. In addition, there are significant differences between entrepreneurs and those who have already started their own business, first with access to more advanced networking, mentoring and business connections.

#### *5. Culture and capital*

Entrepreneurial culture plays an important role for the development of entrepreneurship and Romania is excellent in this respect, having a developed social capital and a positive attitude towards entrepreneurship. But when we look at the categories of people that influence entrepreneurship through a rough general view, we see that successful entrepreneurs, media, events and friends have a high positive impact. At the opposite end of the spectrum; teachers, career consultants, parents and family, which affects the likelihood of becoming a young entrepreneur.

#### *6. Entrepreneurial Education*

23% of Romanian states that participated in at least one entrepreneurship education programme, the percentage is equal to that in the European Union. However, they are dissatisfied with the quality of entrepreneurship education received and believe that they are supported by people not connected with the business. The lack of a connection between school and business entrepreneurship education is the main problem in Romania and improving the resolution of the underlying low level of sustainability of newly established companies.

#### *7. Public policies*

When it comes to the state, instead of stimulating the entrepreneurial ecosystem development, measures taken by it are regarded by the community as a major impediment to development. The active members of the business community say they are aware of public policies to support entrepreneurship, but deems inappropriate. The lack of results is due to a poor understanding of the Romanian business environment and endemic corruption affecting measures taken at all levels.

*"Entrepreneurs speak"* is a barometer that measures perceptions of entrepreneurship annually from Romania. The study expresses problems, expectations and needs of Romanian entrepreneurs, relying on a qualitative and quantitative analysis of the Romanian business environment.

The analysis focuses on five fundamentals of entrepreneurship: entrepreneurial culture, access to finance, regulation and taxation, coordinated support, education and training.

There are 5 pillars which support the development of entrepreneurship, entrepreneurship education and training is evolving only a positive majority: 62% of entrepreneurs considering that this factor has improved in Romania in the last year.



According to the same study, conducted by EY in collaboration with the Academy of Economic Studies Bucharest, in 2014 among the 765 students, the majority in their final year at university, the three most important qualities for a successful entrepreneur are **vision, motivation and passion**. The responses indicate that young people consider that idea and entrepreneurial vision, combined with strong motivation to succeed and passion for the business idea, are in the DNA of a successful entrepreneur.

The only major positive perception of Romanian entrepreneurs who answered the questionnaire was for entrepreneurship education. This year the perception continued to improve, reaching 62% of respondents.

By comparison, respondents in the study *Barometer students education and entrepreneurial culture among students* are less optimistic than entrepreneurs: only 45% believe that their university education has improved in the last year.

Romania continues to allocate only 2.5% of GDP for education, almost three times less than Sweden and far less than the United Kingdom, Austria, France, USA and the former communist countries such as Poland (5.2 %), Hungary (4.7%), Czech Republic (4.5%) and even Bulgaria (4.1%). According to the budget law in 2014 education received 3.2% of GDP. 2015 education budget is the equivalent of 3.7% of GDP.

Despite an improvement in the perception of entrepreneurship education for the second consecutive year entrepreneurial education deficiencies were reported by entrepreneurs among the most important obstacles to business development in Romania in 2014 or 2015. This year access to finance ranked second, after tax considerations, while entrepreneurship education and training, coupled with the entrepreneurial culture in Romania were ranked third among causes that keep down the Romanian entrepreneurs.

Among the solutions to improve entrepreneurship education, the entrepreneurs indicated:

- courses to high school students real practical business and in companies in the region who are high school
- changing teaching methods and assessment of education
- funds for the reimbursement of courses attended by entrepreneurs
- coherent program to revitalize vocational schools
- financial education courses in schools
- the involvement of professionals who have created and increased business in organizing and delivering entrepreneurship education
- forcing academics to have a relationship with the private system (eg 50% of teachers are external collaborators in the private sector).

Specific programmes for entrepreneurial education (56% of responses) are the most representative for Romanian entrepreneurs to improve the perception of entrepreneurship as a career choice among students.

In second place, up from last year, came government programmes that support entrepreneurship, such as "SRL-D program" through legislative measures encouraging the initiation of a new business or stimulating the establishment microenterprises.

At the same time, success stories (11%) of entrepreneurs, as well as mentoring programs (11%) are perceived as equally important.

Complementing government support entrepreneurs help themselves by providing mentoring for those at the beginning of the road. Compared to last year, when 80% of respondents offered mentoring in an organized or informal environment, in 2015 the percentage of those who provide mentoring fell down to 68%. This decreased percentage can be explained by increasing number of companies which assume that they are at the beginning (with a turnover below EUR 1 million) of the total respondents to the questionnaire.

When asked what should help in the development of entrepreneurship, most students indicated simulations type creates and manages their own business (18%), internships in entrepreneurial companies (17%) and entrepreneurship training (17%).

**Globally, the age group 25-35 years is the most dynamic in terms of setting up their own businesses. Romania ranks first in the European Union in terms of the intention to start a business, according to a global report of entrepreneurship.**

In Romania entrepreneurship intention is 31%, **three times more than the EU average**. The study by Global Entrepreneurship Monitor, an institution specialized in global research shows that entrepreneurial intention in poor countries is higher than in highly developed. Thus, Romania approaches in this regard African countries, over 30% of entrepreneurial intention. The largest proportion of young people with an appetite for business among all age groups is found in Africa (30%), while their share in the European Union is less than 10%.

Report on entrepreneurship globally for 2014 shows that the age group 25-35 years is the most dynamic in terms of setting up their own business Global Entrepreneurship Monitor

The dynamics of these demographic categories regarding their business establishment has been confirmed by the latest study published in 2015, dedicated to youth entrepreneurship.

According to the new study, young people wishing to launch their own businesses are 1.6 times more than people over 34 years. The problem is that created youth affairs generate fewer jobs and less survive.

A problem exacerbated by the financial crisis and economic downturn. Encouraging young people to launch profitable business is seen as a development strategy necessary for their integration into the labor market "- says Mike Herrington, executive director of the Global Entrepreneurship Monitor (GEM), at the launch of Future Potential - a GEM perspective on youth Entrepreneurship in 2015.

On the other hand, the data collected for the report shows that the main motivation for starting a business, however, identified an opportunity rather than a necessity. The primary method of financing in general, the countries analyzed, consists of savings, followed by family savings and bank financing or other financial institutions, is hardly 3rd.

#### *Future governmental policy*

Since 2009 a new policy was established, encouraging electronic devices to provide an informational service. However, the term e-government was imposed globally meaning "the state government via electronic technology."

In general, eGovernment is to simplify working patterns through the application of information and communications technologies in the areas of information management, communication and transactions within and between state institutions and between state and citizens or companies. This instrument could be used successfully for educational purposes and a set of objectives could be established:

Objective 1: Develop tools fast, efficient, modern and attractive (by presentation and interactivity) for public support, a public awareness on ICTs and its support in education.

Objective 2: Providing information on existing e-education applications:

- an e-education applications (presentation, demo);
- an online library (linkages).

The main benefits for citizens and administrations are:

- Focus information on the educational system in Romania, with the possibility of selecting the desired information, search the archives and databases;
- Access to services to assist citizens in relation to the education system;
- Access to e-education applications;
- Arrange and facilitate access to existing sites in the area.

#### [The necessity of entrepreneurship education in Romania](#)

Regarding educational plateau, state of entrepreneurship education into the Romanian education system has a number of specific elements.



At school level, there are several initiatives in this regard, but few alternatives. As regards primary and secondary education, there is an awareness of the importance of entrepreneurship education in grades I-IV and classes V-VIII there are several programs that can be implemented in schools through the school curriculum or extracurricular activities, but they are part of the common core curriculum. Regarding secondary education, entrepreneurial education is a compulsory subject in class X has (or Twelfth technical high schools) and is taught by professors of economics; There are also two national initiatives recognized by the Ministry of Education, Research, Youth and Sport which gives young people the experience of running a company familiar with the process of managing a business (Central Network exercise firms / simulated enterprise in Romania) and the launch attracting resources and selling a product / service (Junior Achievement Romania: Company).

In higher education, entrepreneurship education appears in three distinct forms. This is, firstly dedicated courses or courses that teach related materials, in particular management using relevant tools and methodologies for youth entrepreneurship training (case studies, business plan). Examples in this respect are offered by the Faculty of Business (Babes-Bolyai University of Cluj-Napoca), Faculty of Economics and Business Administration (Babes-Bolyai University of Cluj-Napoca), Faculty of Commerce (Academy of Economic Studies).

Secondly, there are dedicated programmes that bring together more entrepreneurship training courses for learners. One example is the entrepreneurial management at the Faculty of Economics and Business Administration (University of Timișoara).

Thirdly, there are dedicated faculties. At the moment there is one faculty profile in Romania in Bucharest Polytechnic University (Faculty of Entrepreneurship, Business Engineering and Management). However, remember that there is currently no centralization of entrepreneurship education in higher education situation in Romania.

In the adult training and lifelong learning, attention to the entrepreneurship was improved: in recent years the number of opportunities have increased, but there is a need to increase their quality; existing opportunities aimed at both the theoretical (dominant through workshops and training programs) and the implementation (programs offering the chance to win advisory and capital, thus having education as subordinate objective of launching new businesses).

### **Structural Barriers**

- decreased exposure of young people to entrepreneurship education opportunities
- insufficient training of the majority of those who teach entrepreneurship, especially in high school.
- lack of relations between students from different faculties (interdisciplinary) needed to form teams with more diverse skills

- universities do not have products based on research carried out internal frame, as additional sources of income to ensure sustainability research; also Romanian inventions, winner of multiple medals are not converted into products / services that compete in the market due to problems of approach and high startup costs.

### **Psycho-social obstacles**

At this level, barriers to technology development and entrepreneurship in Romania were:

- poor understanding of what risk and risk exposure, and decreased tolerance to it;
- attitudes and misreporting in the matter of securing financing for business start generating an increased passive and too little creativity and enthusiasm to the process of obtaining the resources required by a startup
- opposite extreme entrepreneurial mentality problem, which is considered an option for people with large financial resources, and sometimes unethical approach; cult small
- entrepreneur who launches and grows through creative and practical solutions is still less common, although becoming increasingly popular due to increasing entrepreneurship as a subject in the last 2-3 years
- career as a preference as a safer and more comfortable option than entrepreneurship.

### **Obstacles of teaching methodology**

At this level, barriers to technology development and entrepreneurship in Romania are:

#### *Educators*

- does not address the practical implementation of projects involving resource management and solving real problems; most are limited to drawing up a business plan
- focus on the business idea to the detriment of the business model and understanding that the implementation is what determines the success or failure of a business idea
- teaching methodology (both high school and college) is concentrated on business plan development, not driving it and the practical activities
- reduced presence of professionalism that attitude to the quality of work; Currently, there is an overall deficit in the educational system in terms of an education, in all disciplines, those skills and values that are necessary for a better quality of results youth, both projects of entrepreneurship education, and in other types of activities
- Low addressing the theme of social entrepreneurship in education and training establishments.

### **Solutions through education**

*Knowledge management platform in entrepreneurship*



This platform will provide access to updates, useful both to those who want to document before starting a business and those seeking opportunities for entrepreneurial education; a special part of this platform would be to centralize data on entrepreneurship education at national level to identify transparent, real-time needs and trends in this area.

#### *Interdisciplinary courses*

In these courses, students of several universities will participate in mixed teams at the start of a startup. The long term goal is to incorporate this type of course in the formal structure of courses and recognition of universities appropriations; keeping in touch with the practical component and business environment through the presence of entrepreneurs and professionals in relevant fields.

#### *Training programs-of-Trainers (ToT)*

The purpose of this type of arrangement is better training of those who teach undergraduate entrepreneurship education cycle.

#### *Promote entrepreneurial culture*

This solution will be put into practice through conferences, projects and other activities to popularize entrepreneurial culture in schools, colleges and universities, with the support of actors from the education, business, associations of entrepreneurs, pupils, students and parents and so on

#### *Platform for online entrepreneurship education*

This platform will be available nationwide as a tool for distance learning course addressed especially to young people, which will help academics with experience in business.

## Focus Group Activities

Ms. Oana BRINZAN, expert chairing the meeting made a brief explanation of the project and its aims, introducing the partnership and outlining the key activities and timing of Entrinno.

There were some questions about partners of the Project and their experience.

Ms. Oana BRINZAN made a visual presentation and the participants understood that they are a target group (youth and stakeholders) and their answers will have a value of example.



### Participant presentation

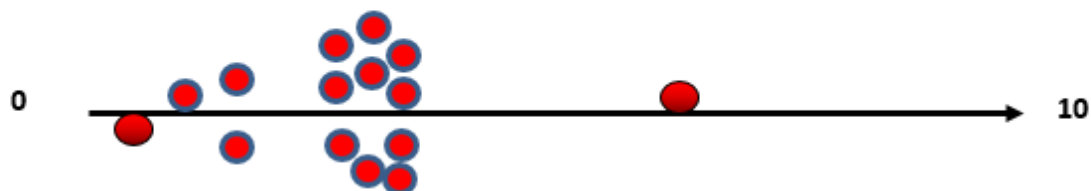
Each participant – students and stakeholders made a brief presentation, by introducing themselves, as name and surname /representing company/organization/group /main occupation / experience with entrepreneurship

**Participants were having an active and voluntary participation.**

In this phase of the Focus Group, the attendees were asked about where they considered their knowledge about business.

Mostly were situated in the range of 3-4.

Some exceptions were by representatives from Ministry, which she considered a 7 knowledge (in a theoretical way) but practical only 5!



After this first activity, the two groups were separated in two – one group of **young students ( future entrepreneurs )** conducted by Mrs. Simona Haprian and second with **stake holders**, conducted by Ms. Oana BRINZAN.

***The discussions were open, free and very interactive.***

A summary of answers to the two questions are attached below (in English) and a conclusion of the discussions is filled in the table below.

Following the two meetings, a common discussion took place.

***Very important that both groups have express their intention to go on with the support of preparing such on line games.***

They all agreed that we should keep them informed about the development of the Project.

A general conclusion was that the schools are preparing them to ***become good employees*** and ***cutting them almost any initiative of entrepreneurship.***

The **on-line games** will give them the possibilities to **express themselves**, with **free initiatives**, no **obstacles** (artificially one) and **interact** with **different entrepreneurial cultures**.

Pairs	The most important thing for entrepreneurship	What you need for becoming a successful entrepreneur	Why it's worth becoming an entrepreneur
Potential entrepreneur 1.  Entrepreneur 1.	- Courage  - Timing	-Good examples to follow  -Finance	-Do what you want to do  -Being your own decision maker
Potential entrepreneur 2.  Entrepreneur 2.	-Risk  -Motivation	-Leadership  -Ability to pay attention to details	-Money  -Being a leader
Potential entrepreneur 3.  Entrepreneur 3.	- Innovation  - Idea	-Training  -Interactive tools to develop myself	-Fame  -Appreciation
Potential entrepreneur 4.  Entrepreneur 4.	-Decision maker  -Attitude	-Social network  - Money	-Free movement in decision - Satisfaction
Potential entrepreneur 5.  Entrepreneur 5.	- Innovation  - Idea	-Training  -Interactive tools to develop myself	-Fame  -Appreciation



Participants were separated and asked different questions for:

### Potential Entrepreneurs:

- Are you familiar with the term 'entrepreneurship'? Who do you identify as an 'entrepreneur'?

*The persons who wish to develop their own business, establish their own business and intend to keep it and have leading positions, have their own business, have marketing skills*



- What kind of skills do you consider to be entrepreneurial? – Discuss the various ideas they have and write on a flip chart

*Risk undertaking skills, innovation, socializing, decision taking skills, managing skills, attention, patience, thinking, intelligence, persuasion, organization, adjustability.*

- Which of these do you consider to be the most important?

*Risk, innovation, taking decisions, courage, social skills, risk undertaking, patience, knowledge and organization*

- Do you think you have these skills? Were they taught to you in school/college/university? If yes; Discuss how these were developed (through practice, game playing, team work activities etc). If no; Discuss how they might be developed?

*At a low level exercise companies, from university through team activities, acquired in time by taking part in seminars, at school and online.*

- How do you currently improve your skills? (i.e. do you attend formal training courses, do you do distance learning courses/ watch educational videos online etc)

*Video on line and you tube, online games, internet in general, internet training courses, tutorial, long-distance learning*

- Do you own a personal computer, smart phone, tablet or other internet device? Which?  
*smart, pc, tableta, lap top, tv, smart tv*
- Do you use interactive online tools to develop your entrepreneurial skills?
  - YES - What kind of ways do you use?
  - NO – Can you think of any?

*ye( 6), no( 3)*

- Do you play Video or Online Games? – If yes, what type of games (i.e. Action, shooter, Adventure, Role-play etc)

*Action, shooting, rallies, real-life simulators, role-play, BTS, MOPS, courses in English, entertainment, no ( 1), logical games, management, strategy, RPG*

- Do you have game applications on your phone?
  - YES – What kind of games?
  - NO – Why not? Do you think they are not useful?

*yes ( 6) For fun, reflex stimulation*

*no ( 1)*

- Are you aware of any games that are related to entrepreneurship? If yes, which?

*No ( 5)*

*Yes (2) Archeoge (?), Jane's ... ?*

- Do you think that games could be used to develop entrepreneurial skills?
  - YES – Why?
  - NO – Why?

*Helps knowledge improvement by playing games, you do not risk any real losses, facing difficult situation which can be then analyzed, more young people can be interested, you may come to decision-taking, you may become a virtual entrepreneur.*

- Would you use a game that aims at developing your entrepreneurial skills?
  - YES – Why?
  - NO – Why?

*Improvement of knowledge and entrepreneurial skills, to acquire knowledge in a pleasant way.*



**Stakeholders:**

- What do you think is the current state of entrepreneurship amongst young people in your country? Is there a lot of interest and knowledge in enterprise?

*High interest, expired manuals, average knowledge, young people with innovative ideas, more study hours, qualifications, specializations.*

- What support is available to potential entrepreneurs?

*Schools teach you to become a good employee, the identified need leads to an adaptation of the courses, great fluctuation in opening/closing of companies, projects or courses, exercise companies, information about the establishment of a company, less information about how to run it.*

- Do you feel that young people have the entrepreneurial skills that they need to be successful in the business world (either to set up their own business or work for someone else)

*There is a native predisposition, it needs to be developed, the need for education, knowledge, responsibility, skills are not encouraged, and they are neither developed nor highlighted.*

- What are the skills you feel are most important for young people to develop? Discuss and write up on a flipchart)

*Identity, socializing, learning willingness, leadership, initiatives, perseverance, interest, education, methodical, sound management, team work, informatics, attention, balance, practical mind, creativity, option, courage, collaboration, critical thinking, expression, perseverance, orientation, interest, knowledge, applicability.*

- Which of these skills do you feel is most lacking? What should training courses aimed at developing entrepreneurial skills be focussing on?

*Socialization, feedback, education ( respect, language), fit for leadership, management, simulation of real activities, identity, practical applications, business plan, courses*

- What are the most common training methodologies used at the moment to develop such skills?

*Webinar, informal meetings, theoretical courses are useless, self-education, training courses for writing a Business Plan,*

- Are you aware of any online games that can support people to develop these skills? If so which?

*No ( 6)*

- Do you think that online games could be successful in teaching these skills? Discuss the reasons why/why not.

*Yes ( Farmiville), real situations are simulated with decisions and consequences, development of a multilateral thinking.*

- What are the benefits of online learning over face to face learning?

*Classical education develops socializations, online make you think, you may have more personalities, online allows the flourishing of creativity, the constraints related to learning spaces are eliminated, encourages the rapid decision taking, online the behavior and gestures of the people cannot be seen.*

- What would you like to see in a new game designed to develop entrepreneurial skills?

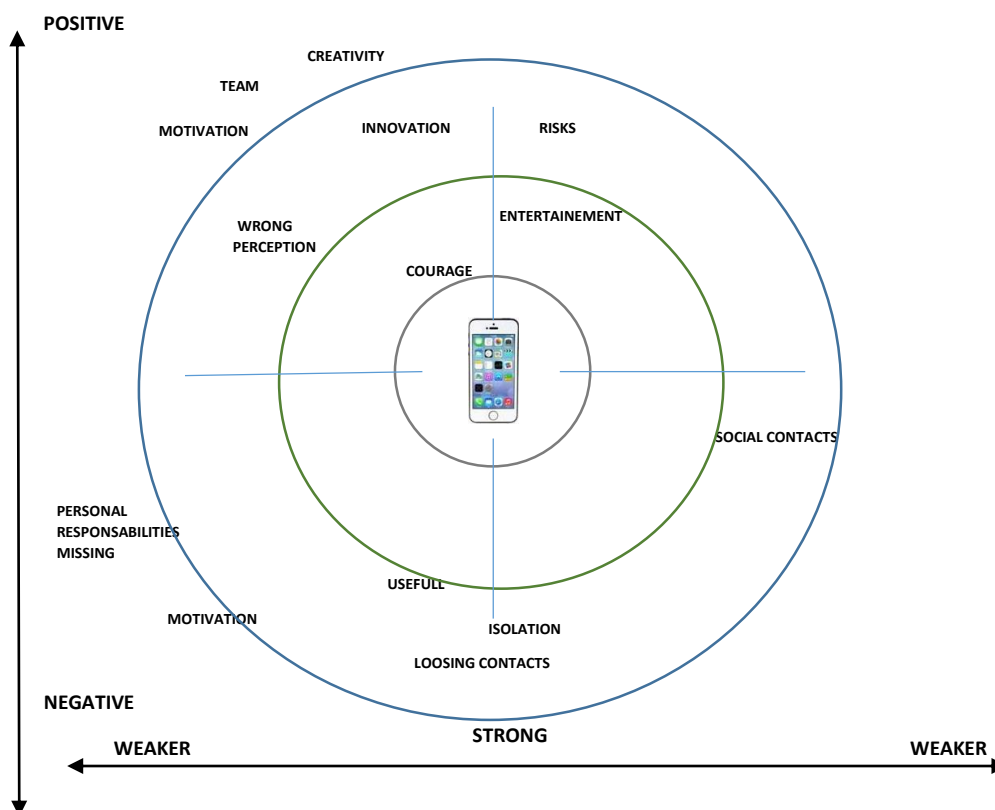
*The real loss of money (not much), quick decision taking, real entrepreneurial situations, (controls, hiring, firing, time management), real simulation with a minimum investment leading to the development of real loss and gain spirit, simulation of the body language, expression.*

The Diagram exercises was fixed and the expert Ms. Oana BRINZAN, dictates the format and the dimensions of the diagram.

There have been 19 participants, out of which 15 responses, grouped in a common answers, posted in the bellow Diagram.



PERSONAL DEVELOPMENT



## Analysis of the questionnaire

In each partner country, questionnaires were sent out to relevant target groups in order to identify respondents' perceptions about games with an educational purpose, in particular focusing on entrepreneurial games. Responses were translated into English and incorporated into an overall database that served as a basis for this analysis. The overall database ensured consistency and reliability in the analysis of the questionnaire.

The partnership assembled 251 responses across seven EU countries. The initial target of 30 respondents/country was exceeded by 41 responses. Moreover, the minimum 30 responses were accomplished in each partner country.

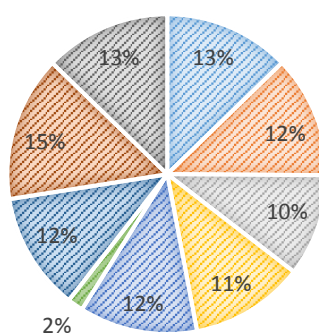
In this section of the report, the major findings of the overall questionnaire are shown.

### Country of origin

As it can be seen below, most of the respondents came from partner countries. They were nearly equally spread across the partner countries. 2% of the respondents came from countries outside of the partnership.

### COUNTRY

■ Cyprus ■ Greece ■ Italy ■ Lithuania ■ Malta ■ Other ■ Poland ■ Romania ■ UK

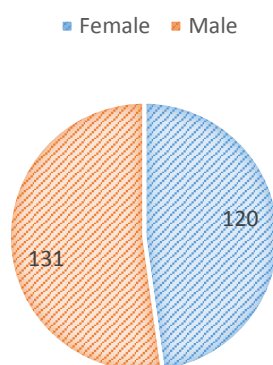


## Gender

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In terms of gender, participants were nearly equally distributed. Males were slightly better represented among respondents. Since in current figures, women represent only around 30%<sup>38</sup> of entrepreneurs, this is a very encouraging figure, suggesting that the project is attracting a higher than average number of young women.

### GENDER(PERSON)



## Occupation

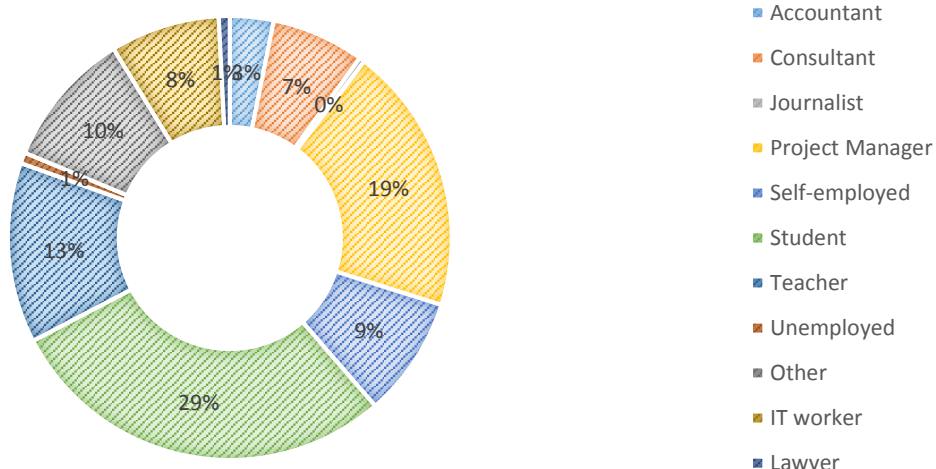
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In regards of the occupation of the respondents, the questionnaire showed a diverse picture. The most represented group was students with 29% of all respondents, followed by project managers with 19% and teachers with 13%. It is important to note that self-employed people also represented a considerable number of respondents, at 9% of the total. Therefore, it also means that almost 80% of the responses came from relevant target groups of the project.

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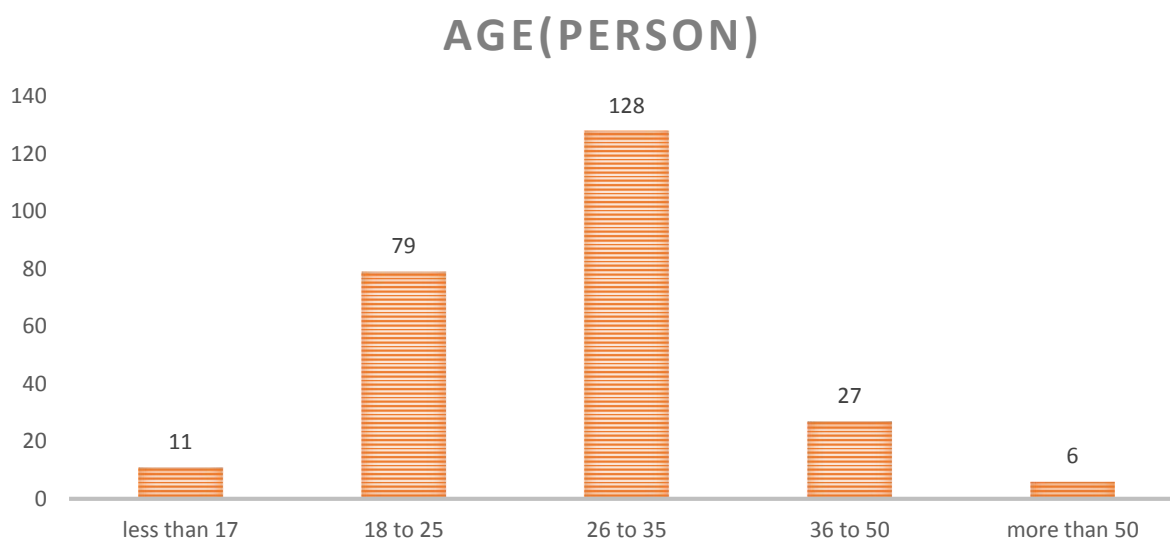
<sup>38</sup> Commission report (2014), 'Statistical data on Women entrepreneurs in Europe

## NUMBER OF RESPONDENTS



### Age

Respondents were grouped into 5 age categories for empirical reasons. As it can be seen from the graph below, the age group of 26 to 35 was the best represented age group, gaining the majority of responses. The age group of 18 to 25 received the second most responses while people over 50 were the least represented in the questionnaire.

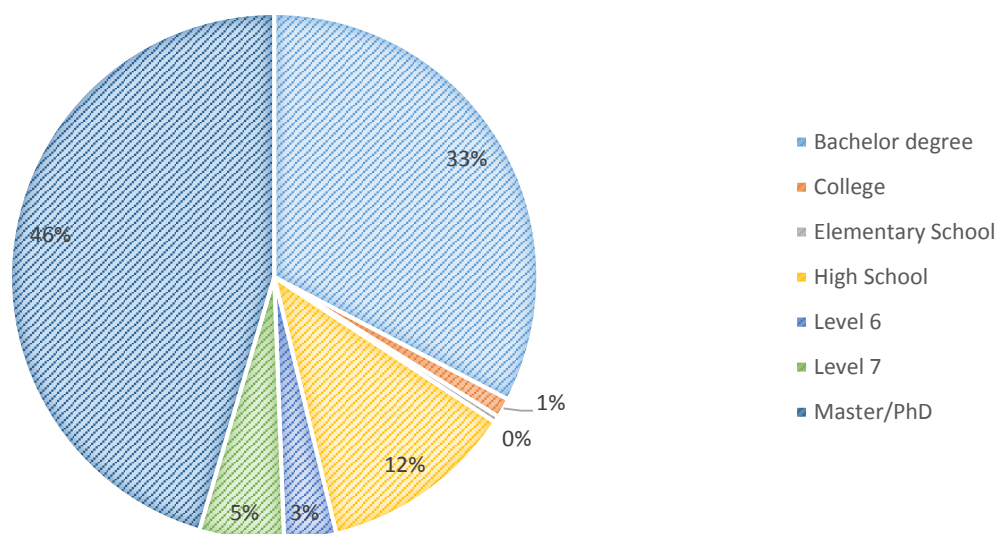


### Education

This question aimed at finding out more about the educational level of the respondents. Interestingly, nearly half of the respondents (46%) acquired Master or PhD level degrees. Furthermore 33% of all respondents had a Bachelor degree as their highest educational level. Thus, almost 80% of the total respondents had completed higher education.



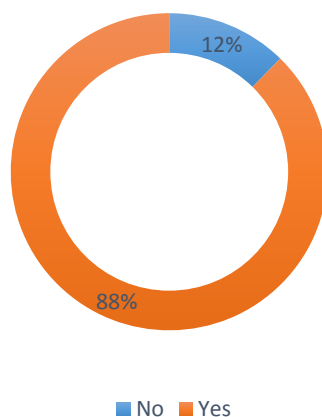
## EDUCATION(%)



### Are you familiar with the definition of entrepreneurship?

As the EntrInnO project is concerned with entrepreneurship and aiming to develop an entrepreneurship game, it was crucial to find out about the level of understanding of entrepreneurship among respondents in the questionnaire. The next question found out that the vast majority (88%) of the respondents were familiar with the term entrepreneurship. Having a certain degree of familiarity with entrepreneurship was important as it guaranteed the relevance of responses.

### Are you familiar with the definition of entrepreneurship?



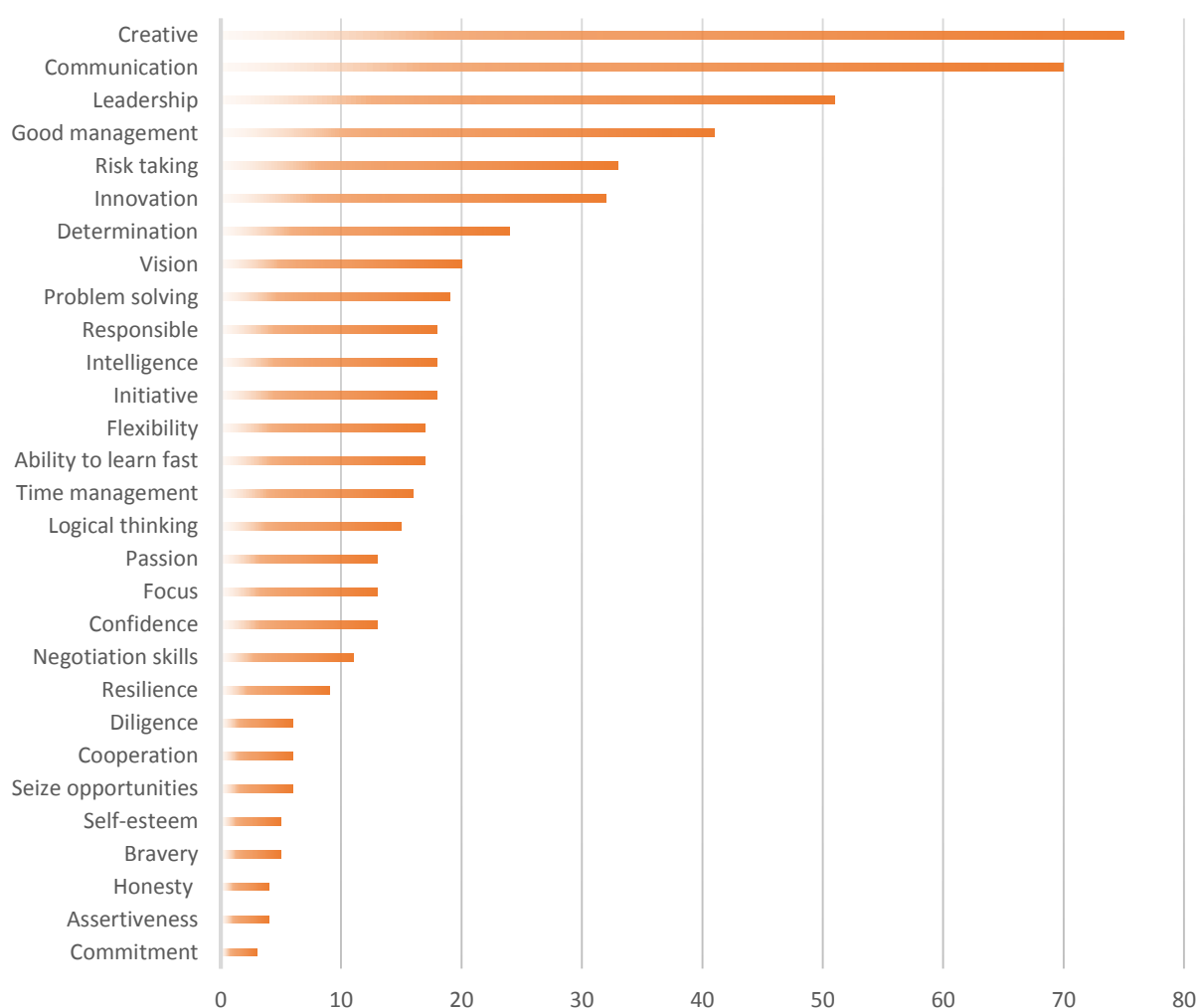
## Most important skills for entrepreneurs

The next graph reveals information about respondents' perception about the most crucial skills entrepreneurs need to possess to succeed. Respondents indicated that the most important ones they believe are needed are:

- Creativity
- Communication skills
- Leadership skills
- Management skills
- Risk taking

However, skills such as time management, problem solving, taking initiative and flexibility were also among the significant characteristics of a successful entrepreneur.

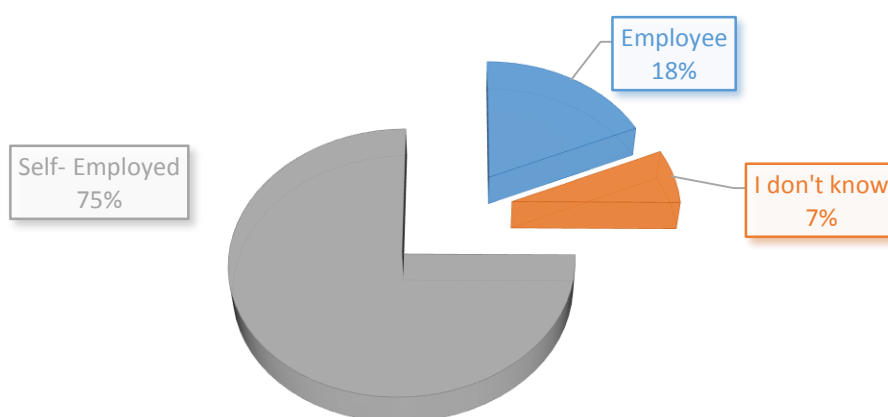
### MOST IMPORTANT SKILLS FOR ENTREPRENEURS



## Preferred job

As the next pie chart demonstrates, there was a great entrepreneurial spirit among the respondents as ¾ of them indicated that they would choose self-employment over employment. It is a great result considering that, according to the Eurobarometer (2012) survey only 37% would see themselves as self-employed. This suggests that partners are targeting the right individuals to be involved in the project and shows that the vast majority of the respondents could take advantage of a game that aims at developing entrepreneurial competences.

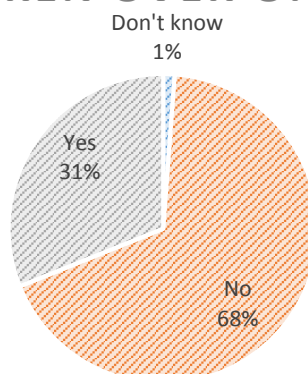
**IF YOU COULD CHOOSE BETWEEN DIFFERENT KIND OF JOBS, WOULD YOU PREFER TO BE...?**



## Have you ever started a business or taken over one?

As the next pie chart demonstrates, the majority of the respondents have not yet been involved in business. 31% of the respondents stated that they have started or taken over a business. With regard to the 14% self-employment rate in the EU (IPPR report, 2015), 31% is much higher than the EU average.

## HAVE YOU EVER STARTED A BUSINESS OR TAKEN OVER ONE?



### Do you currently own/have previously owned a business?

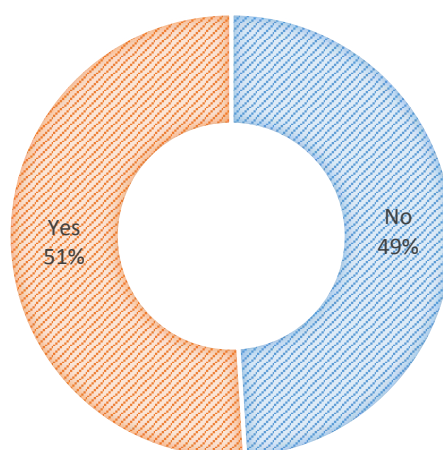
The next question aimed at finding out if the respondents have or have had any practical experience in business. The vast majority of the respondents (202) indicated that they have never been involved in business and only about ¼ (49 respondents) stated that they have had previous experience in owning a business. Among those who own or have owned businesses, we can discover companies such as management consulting, tech startups, consultancy, entertainment, medical services, IT, computer developer, vintage/antique shop, financial service, photographic service, On-line service, project management consultancy, advertising company, digital agency and clothing shops.

## DO YOU CURRENTLY OWN/HAVE PREVIOUSLY OWNED A BUSINESS?



## Have you ever been involved in entrepreneurship?

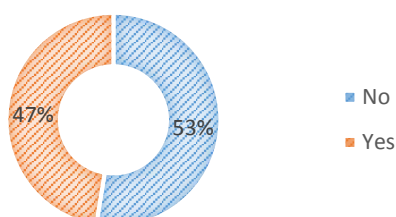
Responses to the above question divided almost evenly among respondents. Respondents were asked to indicate what kind of activity they have been involved. Respondents pointed out that they had participated in university courses, entrepreneurship training, company programmes, entrepreneurship competition and entrepreneurship projects.



## Video Games and Online Games

The objective of this question is to find out if the respondents are engaged in playing with video games or online games. The result is an almost even pie chart: 47% of the respondents indicated that they play with games whereas 53% did not. The questionnaire also revealed information about the type of games that there were the most popular ones.

### DO YOU PLAY VIDEO GAMES OR ONLINE GAMES?



<b>Action games</b>	<b>Role Play</b>
<b>Strategy</b>	<b>Adventure</b>
Trivia games	Sport games
Programming games	Stimulation
Board/Card games	Sudoku
Music games	Logic games

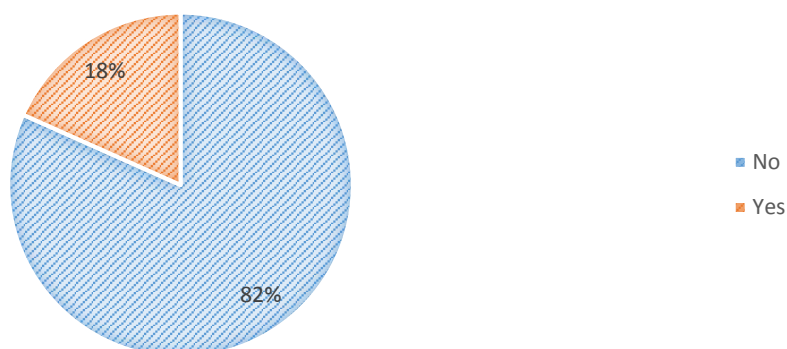
Among those who play games, four games recurred the most times: action games, role play games, strategy games and adventure games. It can refer to the fact that these types of games are the most popular ones among the target audience.

## Type of games

The next question aimed to reveal information if the respondents were aware of any entrepreneurial games and if yes, which ones were those. The question shed light on the fact that only 18% of all respondents were aware of any entrepreneurial related games in contrary to the great majority who did not know any. Respondents were asked to list the entrepreneurial related games they knew. The following ones were the most common:

- MarketWatch
- QuizUP
- Ice Cream Empire
- Riot
- Caesar
- Roller Coaster Tycoon and other “Tycoon” related games
- Stock-o-mania
- Marketing mania
- MMO
- Hay Day
- Football Manager
- MoneyMarket, Cash Flow
- Monopoly games

### ARE YOU AWARE OF ANY ONLINE GAMES THAT ARE RELATED TO ENTREPRENEURSHIP?



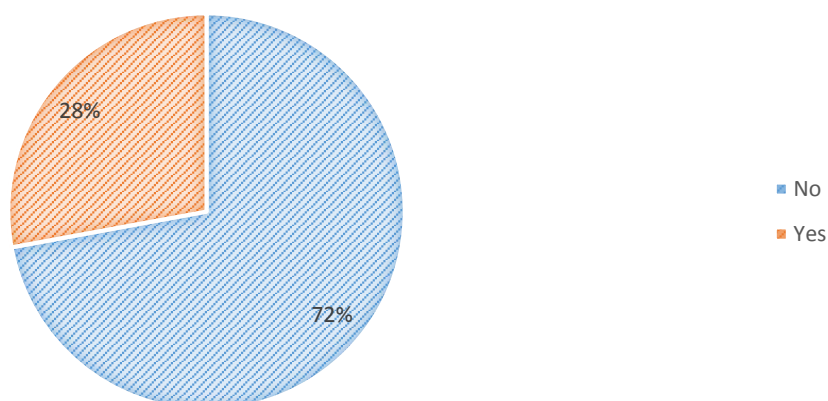
### Are games useful for teaching entrepreneurial skills?

Almost 80% of the respondents believed that games could be used for teaching entrepreneurial skills. The results provide a good basis for developing the EntrInno game. Respondents who represented the “No” answer to this question indicated that an entrepreneurial game could be boring, not interesting, a game should not educate and it would be a waste of time.



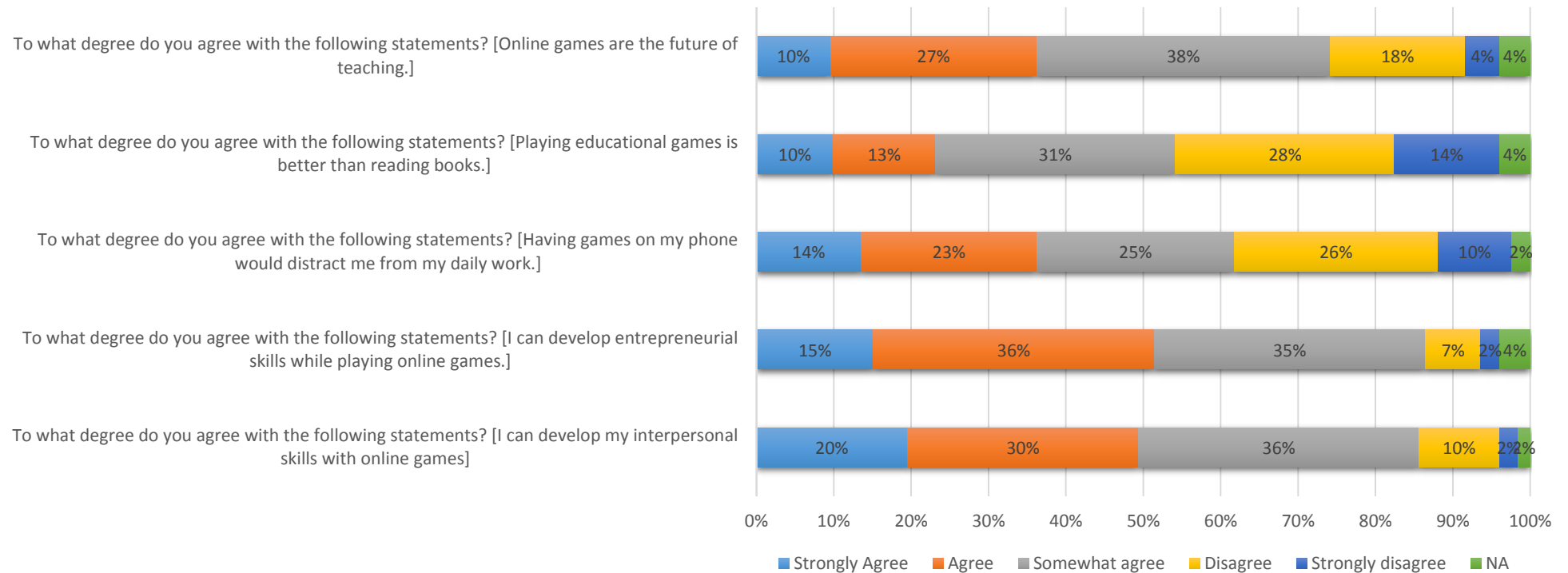
### Have you ever used an online game for educational purposes?

The next question aimed at finding out whatever the respondents have used online games for educational purposes previously. As it can be seen from the pie chart below, nearly  $\frac{3}{4}$  of all respondents have never used online games for educational purposes.



### To what degree do you agree with the following statements?

The following graph represents the degree of agreement from the respondents about 5 different statements. The majority of respondents strongly agreed/agreed/somewhat agreed that online games are the future of teaching. The result was somewhat equal to the statement aiming to find out the opinion about playing educational games and reading books. A similar outcome could be observed when respondents were asked if they would be distracted by a game on their phone. The vast majority of respondents agreed that online games can develop entrepreneurial competences for users. Finally, similar results can be seen for the last question when respondents were asked about if online games could develop interpersonal skills.





## Facilitators' comment

After analysing each of the focus group, we can state that the partnership has managed to deliver eight highly successful focus group. The fundamental objectives of bringing together young adults and stakeholder to shed light about their concerns regarding entrepreneurship at the national level and identify their needs in view of entrepreneurial training have been achieved. As the consequence of the delivery of the national focus group, the partnership has acquired valuable information that is inevitable for carrying out the latter activities of the EntrInno project.

Each focus group built basic understandings of the EntrInno project, established the key teaching concept and allowed participant the exchange good practices. The focus group took a complex topic and managed to make it understandable for each the participants regardless of age, experience or qualification.

Facilitators from each partner country built participants' confidence by being approachable and giving them respect. Facilitators paid careful attention on not pointing out minor errors that occurred during the focus group, thus they encouraged continuous discussion. The length of each of the focus group proved to be sufficient to discuss the topic and all the participants were satisfied with the facilitates provided. Facilitators managed to build an atmosphere where human connection among the group members was ensured. As the consequence of the friendly nature of the focus group, participants were able to open up to each other and had fun while facilitators gained important information.

Finally, the majority of the participants were excited about a game aiming at developing entrepreneurial competences for users and they indicated that they'd be pleased to be contacted during the pilot period of the game.

**In the next, some of facilitators' comments are revealed in order to get a better understanding how each focus group was conducted.**

Participants enjoyed the meeting and were highly interested in the game. They acknowledged the value that such a game can have for the development and enhancement of entrepreneurial skills. The focus group went very well and the outcomes were very satisfactory; participants were willing to collaborate, provide information and other input for the purposes of the project. It was important that they acknowledged the value of the project and that was reflected in their enthusiasm. A game to promote entrepreneurial skills as never been created in Cyprus, and it is significant that there will actually be practical tasks to enhance the different skills interactively and through problem solving, decision making and social activities. At the end of the focus group, participants had informal chats



with each other, as most of them were acquainted through the different networks they belong to. They also had informal chats with the facilitator, throughout the breaks and at the end, regarding the game, regarding potential presentations of the project at different multiplier events they organize and also regarding receiving updates about the progress of the game. They all made themselves available for any input needed throughout the course of the project, as they consider the project particularly interesting. (Cyprus)

The focus group was delivered by great facilitators who have extensive knowledge on their individual fields. Generally, facilitators were satisfied with the workshop because they could establish a collaborative relationship with participants that led to a very successful and flourishing session. Facilitators were able to create and sustain an environment of trust and openness so that everyone felt safe to speak up honestly and where different opinions were respected. They ensured that everyone made them feel included in all activities and freely joined in the discussions. The structure of learning was provided and they paid attention to opening and closing sessions as well as keeping it to the agenda. Facilitators were open to answer any question from the floor. (UK)

Facilitator's impression is that in Italy there's still a confused situation: among those youngsters who want to run their own business the constraints and difficulties in law, credit and environment are really disappointing and they look for some solutions to avoid those problems in an innovative way; among older people (entrepreneurs or trainers) there's more pessimism and the scenario they describe for new generation is not positive and basically consider that in Italy a huge change should be needed support these young persons. One of those said "it is not the business not ethic, it is our system which is not ethic". About the game, facilitators found a great interest for the tool itself as it is something not very known and utilized in Italy for learning while most of the young participants are gamers for fun. Participants suggest that some fundamental skills should be fostered in the game, such as: resilience, transparency, attitude to listen to other persons. (Italy)

The meeting was really informative, both groups were highly engaged and the discussion was productive. All the meeting went according to the proposed plan. As the consequence of the interesting topics discussed during the focus group, discussions need to be cut off in order to keep the time limit. (Poland)

## Recommendations

As a consequence of the state of the art report from each partner country, the partnership gained valuable information of the current situation of entrepreneurship and young entrepreneurship in consortium countries. The picture is quite peculiar in terms of level of entrepreneurship in each country. Europe is experiencing the pressing issue of high youth unemployment. Young entrepreneurship cannot be the sole remedy to this problem, however encouraging young people to become entrepreneurs can contribute to the mitigation of the high youth unemployment rate.

### Skills

One of the aims of the gap report was to find out what the target group of the EntrInno project think about the most important skills for entrepreneurs. Identifying the crucial skills for a successful entrepreneur serves as a good basis for the development of the game. By implementing these skills into the game, the partnership could generate greater interest among the target audience. The extensive questionnaire sent out across the partner countries determined the following skills are considered to be the most important:

- Creativity
- Communication
- Leadership
- Management
- Risk taking
- Time management
- Problem solving
- Taking initiatives
- Flexibility

Other skills were also mentioned by respondents such as responsibility, flexibility, passion, logical thinking, resilience and negotiation skills.

These skills play a crucial role in the success story of entrepreneurs. A game which focuses on polishing these skills for entrepreneurs can certainly help them to become better ones. Current, formal education systems do not foster the development of these skills and therefore this is a crucial time to implement a tool that can help aspiring young people develop them.

## Game

In this part of the report, the most important comments are summarised that have been derived from the national focus groups. In order to create an effective game that coincides with the overall objectives of the EntrInno project, the following aspects are worth considering:

- Implementing the gamification element of a scoreboard so that users can view their ranking in relation to others. It could facilitate competitiveness in the game. It would motivate them to attempt the game multiple times in order to break their friends' records
- Social component: players should be able invite their friends to join the game, chat with them and challenge them. Participants would like to see a game which is more than a game but also provides a platform for discussion, idea generation and networking.
- Implementing a social event in the game that would aim at bringing together users once in a while to challenge each other.
- The gamification element of a badge system could be a valuable component of the game. Upgrading users based on their achievement can stimulate enjoyment and encourage users to come back to the game and play on a daily basis.
- The game should particularly focus on collaboration among players. Participants would like to see a game which enables them to team up with other players in order to achieve a common goal.
- The majority of the participants indicated that in a scenario based game they would like to see real world situations.
- Participants put emphasis on highlighting that the game should be focused on developing various entrepreneurial and soft skills for users in an entertaining way. People do not want to get bored while playing the game therefore entertainment has to be a crucial factor.
- In the game imagined by the participants, players are using different strategies, managing resources and collecting points in order to overcome obstacles while playing.
- Some of the participants indicated that they would like to see social media components in the game. Thus people would be able to share their experience as well as invite their friends to join the game.
- In order to avoid boredom in the game, it is not recommended to use "repetitive screens" that would make the game monotonous. Therefore, participants recommended the idea of playing short sessions each day which concentrates on developing a different set of skills. Thus, it would motivate students to use the game on a daily basis.
- It was mentioned several times by the stakeholder group, that the game should be implemented as a complimentary tool in the business studies' curriculum. It was suggested to



involve teachers in the piloting of the game so that they could prove if the game could be a useful element of their teaching.

- Participants believed that the central focus of the game should be an entrepreneur who is a human being with passion and enthusiasm for his/her job.
- Challenges during the game should present real challenges for participants that could be only resolved by using logic and open attitudes.
- As young adults face several difficulties in Europe today, participants of the focus group believed that taking risk and adaptability are two of the major factors that the game should be focusing on, as these characteristics are often missing from young people.
- Apart from the game being entertaining, it should also concentrate on making users understand the current market and equip them with practical hard knowledge. These practical methodologies should be adapted to the labour market needs thus it could contribute to the business reality of each player.
- Assessment should be considered an important aspect of the game. Players should be able to assess and rate themselves after finishing a level/stage of the game. Seeing their improvements could encourage them to keep on playing.
- One of the participants suggests to include in the training path the issue of emotional intelligence, for example recalling the experience of Six Seconds (<http://www.6seconds.org/>) which works for the development of tools and test to support such learning processes.
- Apart from creating competition, the game should also focus on building an **active community** that would gather people together with similar interests and passions.
- In particular, to the young adult group, they considered mentoring as an important aspect of entrepreneurship and therefore they would like to see this element showing up in the game. For instance, the game could include a fictional character that could act as a mentor when players get stuck at certain point. It would give players the confidence to keep on trying to reach the next level and would prevent them from getting annoyed after failing over and over again.
- Apart from getting users engaged with the game, it should also create an atmosphere where learning is guaranteed and thus real business theories are communicated in an entertaining way.

## Existing Games

Name of game	URL	Short Description	Background of game (who developed it)	Target Group	Achieved Results (no. of users, no. of downloads...)	Additional Information (as needed)
StartUP_EU	<a href="http://startup-eu.net/">http://startup-eu.net/</a>	It is an innovative online game to allow high school students to explore and develop the entrepreneurial spirit and attitudes. The game is unique because it asks students to not only come with great and creative idea, but to show how they will turn their idea into a real business, like a true entrepreneur in the world.	EU Partnership LLP Programme  University of West of Scotland	High school students		Project outputs: - Student Guide - Teacher Training units - How to use the platform -Initial Piloting Report -Analysis of Pilot
simSCEO	<a href="https://www.simceo.org/action/welcome">https://www.simceo.org/action/welcome</a>	It is completely online, and allows student users to: 1. CREATE their own companies 2. RESEARCH each others' companies online 3. TRADE: Manage a portfolio by buying and selling shares in each others' companies which immediately influences share prices.  All of this takes place in a customized environment (place, time, duration of simulation, complexity) that is set by the teacher who can also integrate content by sharing dynamic news (real of fictional) with users, encouraging users to make adjustments along the way.		Students		



<b>Plus500</b>	<a href="http://www.plus500.com/?gclid=CMj1gYzFmsoCFUE TGwod1kUCbQ">http://www.plus500.com/?gclid=CMj1gYzFmsoCFUE TGwod1kUCbQ</a>	Plus500 offers a real time stock trading service. It has a free option which is convenient for those who would like to learn the basis of online stock trading	Plus500UK Ltd.			Online and mobile application
<b>The Small Business Game</b>	<a href="http://www.thesmallbusinessgame.co.uk/">http://www.thesmallbusinessgame.co.uk/</a>	<p>The Small Business Game is a FREE online interactive simulation that provides the experience of running your own business.</p> <p>Students can:</p> <ul style="list-style-type: none"> <li>- Learn what it is like to manage a small business.</li> <li>- Learn what works in business-and what doesn't work.</li> <li>- Experiment with different strategies and tactics to see the impact of your decisions.</li> <li>- Play the game well and you might be able to dominate the Leader board.</li> </ul>	The Small Business Company Ltd	students		
<b>Business Strategy Game</b>	<a href="http://www.bsg-online.com/">http://www.bsg-online.com/</a>	The Business Strategy Game is an online exercise where class members are divided into teams and assigned the task of running an athletic footwear company in head-to-head competition against companies managed by other class members. Company operations parallel those of actual athletic footwear companies. Just as in the real-world, companies compete in a global market arena, selling branded and private-label athletic footwear in four geographic regions — Europe-Africa, North America, Asia-Pacific, and Latin America. All	The Business Strategy Game was developed by the University of Alabama.	Business People, Management students.	The Business Strategy Game simulation is used at more than 600 universities in the United States and internationally.	In The Business Strategy Game, 1 to 5 class members are assigned to operate an athletic footwear company that produces and markets both branded and private-label footwear and competes head-



		<p>aspects of The Business Strategy Game parallel the functioning of the real-world athletic footwear market, thus allowing you and your co-managers to (1) think rationally and logically in deciding what to do and (2) get valuable practice in making a variety of different business decisions under circumstances that mirror real-world competitive conditions.</p>				<p>to-head against footwear companies run by other members of the class. As many as 12 companies can compete in a single industry grouping (class sizes above 50 are typically divided into two or more industry groups). The companies compete in a global market arena, selling in four geographic regions— Europe-Africa, North America, Asia-Pacific, and Latin America.</p>
<p><b>Beer Game</b></p>	<p><a href="http://www.beergame.org">http://www.beergame.org</a></p>	<p>The beergame is a role-play simulation game that lets students experience typical coordination problems of (traditional) supply chains, in which information sharing and collaboration does not exist. In more general terms, this supply chain represents any non-coordinated system in which problems</p>	<p>The beergame (or beer distribution game) was originally invented in the 1960s by Jay Forrester at MIT</p>	<p>Business People, Management students.</p>	<p>N/A.</p>	<p>The beergame simulates a four stage supply chain (retailer, wholesaler, distributor and factory). Each stage is played</p>





		<p>arise due to lack of systemic thinking. The aim of the players is rather simple: each of the four groups has to fulfil incoming orders of beer by placing orders with the next upstream party. Communication and collaboration are not allowed between supply chain stages, so players invariably create the so called bullwhip effect.</p>	<p>as a result of his work on system dynamics and s widely used.</p>			<p>by one or better two or three players. A supply chain is typically played by 8 to 12 people; more than one supply chain can be administered in one class at the same time. The task of each supply chain is to produce and deliver units of beer: the factory produces and the other three stages deliver the beer units until it reaches the external customer at the downstream end of the supply chain. The aim of the players is rather simple: each sub group has to fulfil the</p>
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						incoming orders of beer.
<b>Virtual Platforms</b>	<a href="http://mke.tucserv.tuc.gr/BussinessSimulation/">http://mke.tucserv.tuc.gr/BussinessSimulation/</a>	The Virtual Platforms seek to provide useful experience for users, experience usually acquired in the work arena, in real businesses. The aim is to teach students methods of dealing with the business nature of problems that are likely to encounter as future employees, simulating in a realistic way the business operation.	Virtual Platforms were developed by the Technical University of Crete in the context of the entrepreneurship course.	Engineers receiving management training.	N/A.	
<b>Epixeirein</b>	<a href="http://epixeirein.ntua.gr">http://epixeirein.ntua.gr</a>	The goal of the game is to allow the player/manager to familiarise with the problems that arise in a dynamic, relevant to the reality and competitive environment. The game allows the player/manager to familiarise with the businesses' daily operations and the required decision-making.	The game was developed by the Lecturer of the Industrial and Energy Economy Lab George Mavrotas.	Engineers receiving management training.	N/A.	Every player or group of players is called to develop innovative business ideas regarding the production and promotion of a specific product based on a defined initial capital. The initial capital should cover needs from A-Z. Lending is provided in excess of the initial capital and the player/manager



						is asked to assess the option before going for it.
<b>HOT SHOT BUSINESS</b>	<a href="http://disney.go.com/hotshot/hsb2">http://disney.go.com/hotshot/hsb2</a>	It is a Flash game that has been designed for children, but successfully employed for introducing students with the basic principles of the entrepreneurship. The student has to open and run his own business, taking the best decisions to make it successful. Five business settings can be selected at the beginning: landscape (gardening) service, pet shop, custom skate, comic shop, candy factory. The game-play in the five scenarios follows an identical schema, consisting of six stages, each one presenting different situations with different educational objectives. Before starting the business, players have to choose the financing mode (get a bank loan or use own money), then they can rent tools and material needed to carry out the activities and decide how to advertise their business (different channels, different costs, different population reached). During the game, pop-ups appear, containing “news” related to competitors’ choices and/or specific events that the player should consider for taking decisions. Players have also access to a real time report on the situation of their investments, profits. The situation of the local market may vary, so that on-the spot decisions need to be taken. A full financial report for each week is presented, so to enable further tuning of decisions and activities.	DISNEY Inc.	9 e i 12 years children But appreciated also by teens and students of other ages.	Not found	The game supports mainly strategic thinking, but at very low level, since the pace of the game is very tight and the type of decisions that can be taken are simple and immediate. For example, players have to rapidly choose what machinery to install in order to satisfy their customers’ typologies.
<b>SIM VENTURE</b>	<a href="http://www.simventure.com">www.simventure.com</a>	It is a single-player business game, which aims to teach the basis of company management. The player’s managerial/entrepreneurial skills are solicited in a high detailed and flexible (with huge number of parameters) simulation. The game exposes the player to a number of factors in four functional areas of sales and marketing, organization, operational (design and production) and finance. Product development is well	Venture Simulation Ltd.	Young people	Not found	Strategic thinking and decision-making abilities are important for the game. Moreover, the complexity of the simulation allows for the division of responsibility within

		<p>addressed, differently from the other two featured games. The game runs as a month by month simulation. At every month cycle the player has all the time to observe the current status and the achieved results, to take the decisions and then launches the next month simulation. A game session usually has a fixed duration (e.g., 1 simulated year) but is over in the case of bankruptcy. The game provides a good text-based tutorial that includes descriptions of the real world situations while explaining the games mechanics. For every functionality and parameter to be manipulated, the game offers detailed texts, tips and real-world examples that are quite useful for a player to understand well the concept and think of real-case applications. All the interactions are done without time limits. After doing his choices, the player can make the simulator “run a month”. At the end of each month, it is possible to see not only the effects on these parameters, but even a detailed report of the activity the company did during the whole month. Pre-set scenarios on different topics and of different difficulty levels are provided. The game is single player. No comparison with other players is performed, but an Excel sheet can be exported, providing a very wide detail of the performance of the player under several parameters (e.g., company value, cash-flow, profit and loss) in all the months covered by the simulation.</p>				<p>a single company team (e.g. director of marketing, director of purchases, financial director, etc.). This is not a feature supported by design of the game itself, but can be interesting to support specialization in different roles within the same team (company) and development of professional interpersonal relationships.</p>
<b>BIZZ games</b>	<a href="http://bizzgames.be/">http://bizzgames.be/</a>	<p>People get a fun, riskless and easy introduction to entrepreneurship. A team of about 4 persons make up the management team of a virtual company.</p>	BitPress Educatie	Students and adult education	Not found	<p>They learn how to manage the company in the following domains: Management, Marketing, Logistics, Personnel and Finance.</p>



<b>ENTREXPLORER - SERIOUS GAME FOR IMMERSIVE ENTREPRENEURS</b>	<a href="http://www.entrexplorer.com/">http://www.entrexplorer.com/</a>	<p>It is an online serious game for entrepreneurs, to assist them in acquiring new skills useful for managing their future business.</p>	<p>The Economic Policies Research Unit from the University of Minho</p>	<p>General public</p>	<p>Not found</p>	<p>The aim is to stimulate the creativity of the entrepreneurs so they could generate new business/products ideas.</p>
<b>GO VENTURE - ANY BUSINESS</b>	<a href="http://goventureanybusiness.com">http://goventureanybusiness.com</a>	<p>GoVenture Any Business is an instructor-customizable business simulation platform that can be used to simulate virtually any type of business, within any industry and any market. It is playable both individually and in teams. The game objective is to successfully manage a business while competing with other companies, managed by other players or by the computer. The Simulation Manager (usually an instructor) has a lot of freedom to configure the simulation, creating scenarios that can range from very simple to very complex/difficult, The Simulation Manager is also able to model specific events or situations to target specific learning goals. The gameplay consists of making business decisions, which means setting several parameters – price, product features, marketing, human resources, business ethics, among others – before the deadline of each period of the simulation. After the deadline, the simulation advances to the next period and the game presents the results of the previous decisions in terms of sales and profits. A performance score is provided as a weighted sum of different dimensions, and the instructor receives a detailed report with all the activities performed by the students. Every simulation is different (e.g., economic and market conditions), which makes performance not perfectly comparable, but allows for more engaging challenges. Teams compete against each other in the same settings, as in a strategy game, and</p>	<p><b>MediaSpark Inc.</b> a software development, publishing, and gamification company that has been delivering innovative educational solutions for over a decade.</p>	<p>Students and adult education</p>	<p>Not found</p>	<p>The game supports mainly strategic thinking and decision making. In cases where the game is played in teams of more than one person each (we observed that two people would be the most suited choice), it also supports interpersonal relations, as the decisions could be negotiated among all team members, who may also specialize and consider different aspects of company management (e.g., human resources, finance, etc.).</p>

		computer-driven competitors are also generated, creating a good model of the market.				
<b>ICE CREAM EMPIRE</b>	<a href="http://www.icecreamempire.it/">http://www.icecreamempire.it/</a>	The game helps to discover the rules of the financial markets through a simulation of a real business, tests people's decision-making skills and allows to check the outcomes of them. It is developed for tablet, ios and Android, and a Fb version.	<b>Bocconi University (Milan –IT)</b>	Students and wider public	More than 18.000 downloads from 160 countries	<a href="https://www.youtube.com/watch?v=loSqTQ4KXQw">https://www.youtube.com/watch?v=loSqTQ4KXQw</a>
<b>Name of game</b>	<b>URL</b>	<b>Short Description</b>	<b>Background of game (who developed it)</b>	<b>Target Group</b>	<b>Achieved Results (no. of users, no. of downloads...)</b>	<b>Additional Information (as needed)</b>
<b>„Moja firma”</b>	<a href="https://www.nbportal.pl/">https://www.nbportal.pl/</a>	Participant of the game is the owner of a company distributing hardware. He/she prepares the offer, chooses suppliers and manages the company's finances. As a result, after 12 rounds of play the winner is the one who gains the most revenue.	Narodowy Bank Polski [eng. National Bank of Poland]	Youth (lower secondary pupils, secondary pupils, high school students)	The game is available via web browser, no data about no. of users	The game does not require a login page or having a virtual account.
<b>„Od bułki do spółki”</b>	<a href="https://www.nbportal.pl/rozrywka/gry/moja-firma/gra">rozrywka/gry/moja-firma/gra</a>	Participant of the game sells sandwiches. Decides where and how much sandwiches should he/she sell. The aim is to maximize the profit from the sale.	Narodowy Bank Polski [eng. National Bank of Poland]	Youth (lower secondary pupils, secondary pupils, high school students)	The game is available via web browser, no data about no. of users	The game does not require a login page or having a virtual account.
<b>„Headmaster”</b>	<a href="https://www.nbportal.pl/">https://www.nbportal.pl/</a>	The game is to solve a series of economic quizzes with four answers suggested. The participant of the game must choose one of them.	Gamma Net Sztuka Edukacji and Centrum Kompetencji Grupa Szkoleniowo-Doradcza Sp. jawna.	Youth (lower secondary pupils, secondary pupils, high school students)	The game is available via web browser, no data about no. of users	The game does not require a login page or having a virtual account.

<p><b>„Piekarz Przemó”</b></p>	<p>rozrywka/gry/od-bulki-do-spolki/gra</p>	<p>The game is available in three versions: Millionaire, time running out and monopoly market. The aim of the first one is collecting on their the account the amount of 500 000 ORE as soon as possible.</p>	<p>Fundacja Edu Gate Wrota Edukacji and Centrum Kompetencji Grupa Szkoleniowo-Doradcza Sp. jawna.</p>	<p>Youth (lower secondary pupils, secondary pupils, high school students)</p>	<p>The game is available via web browser, no data about no. of users</p>	<p>The game does not require a login page or having a virtual account.</p>
<p><b>„Gra Przedsiębiorczość”</b></p>	<p><a href="http://www.jestempredsiobiorczy.pl/">http://www.jestempredsiobiorczy.pl/</a></p>	<p>In the second one—it’s about reaching the greatest profit during 50 rounds of the game.</p>	<p>Instytut HR Ewa Grodziej – Niewczyk and HR Projekt Szkolenia, Rekrutacje, Doradztwo.</p>	<p>Youth (secondary pupils, high school students)</p>	<p>The game is available for download via the website and can be saved on the hard disk. No data about no. of users.</p>	<p>The game has a very attractive interface and good graphics.</p>
<p><b>PLANTIS</b></p>	<p><a href="http://plentis.eu/ro">http://plentis.eu/ro</a></p>	<p>The project's main product is the platform Plentis online educational game entitled Agropoly. It is a virtual place that combines the fun and joy of playing with the learning and development of entrepreneurial skills and competencies for students in vocational schools with agricultural profile. If these students intend to start their own business in the future, they will already have an idea about the real life situations, and ideas will be developed those skills to become successful entrepreneurs.</p>	<p>Soros Educational Center Foundation, Miercurea Ciuc Contact name: Csilla Lazar Telephone: +40 266 371799 E-mail: sec@sec.ro Link to Web-site: www.sec.ro</p>	<p>PLENTIS project helps students and teachers with educational games online.</p>	<p>Not found</p>	

<p><b>Seriously Entrepreneurship</b></p>	<p><a href="http://www.incsmps.ro/documente/EiS/e-games-ROM-digital.pdf">http://www.incsmps.ro/documente/EiS/e-games-ROM-digital.pdf</a></p>	<p>Seriously Entrepreneurship Project aims to improve entrepreneurship through the development of key skills for entrepreneurship, using a new methodology. The project is based on games and social networks, which allow building learning communities that combine non-formal and informal activities to improve business skills. These methodologies based on a theoretical background and realistic test can provide practical experience in the field of activity of new entrepreneurs</p>	<p>Promoter and partners</p> <p>www.ceaje.es www.cvoantwerpen.be www.southdenmark.be www.inveslan.com www.startvaekst.dk www.apopsi.gr www.incsmps.ro CONSORTIUM Entrepreneurship seriously. Project Reference: 2012-1-ES1-LEO05-48248</p>	<p>General public</p>	<p>Not found</p>	
<p><b>Variety Option for Entrepreneurship</b></p>	<p><a href="http://www.ctvuia.ro/?p=95">http://www.ctvuia.ro/?p=95</a></p>	<p>Comenius Multilateral project learning program LIFELONG The project targets enrich students' knowledge of economics and business issues, familiarizing students with the principles governing the labor market and operation of businesses and banks, forming an attitude of availability in using English, encouraging students in the learning of other languages, develop skills to use different sources of</p>	<p>The Comenius project was done in collaboration with schools in Spain (coordinating country), Turkey, Lithuania and Bulgaria</p>	<p>Students</p>	<p>Not found</p>	





		information and modern technology and not least training students in an attitude of openness, curiosity, tolerance and respect for the right to be different				
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# Annexes


## IT Attendance list

### EntrINNO – Attendance list

Focus Group  
Ancona February 4<sup>th</sup> 2016  
CSV MARCHE

	Name	Organisation (if applicable)	Email	Signature
1	CHRISTO BUCHI	BUBI TREATTO	BUBI.TREATTO@COM	Enrico Buchi
2	GIUSEPPE MARCHIONI	TALENT SPA	TALENT@MARCHIONI.COM	Giuseppe Marchioni
3	LUCA GIULIETTI	MONTE SOSSILE S.p.A.	JULIETTI@MONTESSOSILE.COM	Luca Giulietti
4	Tommaso Iannone	ENTRINNO	T.IANNE@ENTRINNO.COM	Tommaso Iannone
5	LUCA BERGAMINI	PDP PSE	LUCA@PDP.PSE	Luca Bergamini
6	DAVID WOLARE	PDP PSE	DAVID.WOLARE@PDP.PSE	David Wolare
7	CHARRA EGGRANTINI	CSV	CHARRA@CSV.COM	Charra Eggrantini
8	Laura Rossi	IL SEGRE	L.ROSSI@ILSEGRE.COM	Laura Rossi
9	GIOVANNI SARRACI	GO.COM	G.SARRACI@GO.COM	Giovanni Sarra
10	DE PEDRIS VALENTINA	ITELMARCHI	V.PEDRIS@ITELMARCHI.COM	Valentina De Pedris
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## EntrINNO – Attendance list

Focus Group

2016.01.13 Lithuania, Kaunas, Savanorių st.1

Social Innovation Fund

	Name	Organisation (if applicable)	Email	Signature
1	Yeda Andrijauskaitė	Student (KTU)	meduritel@gmail.com	
2	Ignas Valadka	Student	ignas.valadka@gmail.com	
3	Suta Zubionė	Student	uta.zubione@ktu.lt	
4	Arbė Polenskienė	Student	arbepolenciene@gmail.com	
5	Ugnė Skarabaitė	Student	ugne@stebte.lt	
6	Ugnė Pucelienė	Women Employment C.	Ugnate@gmail.com	
7	Šarūnė Jmemaitė	KTU	zavite.jmemaitiene@gmail.com	
8	Esmė Žulpa Štups	KTU	esmenale.styps@ktu.lt	
9	Vita Kancibė	NALHA	vita.kancibe@gmail.com	
10	Regina Motieva	KTE	regina.motieva@ktu.lt	
11				
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## EntrINNO – Attendance list

Focus Group

2<sup>nd</sup> February 2016, Rzeszow, Poland

Danmar Computres

	Name	Organisation (if applicable)	Email	Signature
1	KRYSTINA KRISTEK	Politechnika Cienochila		<i>Kristek</i>
2	TERESA PIECUCH	Politechnika Rzeszow	tpiecucho@pwr.pl	<i>Teresa Piecuch</i>
3	PATRZYKA FORNA	MUSE	patrycja2365@wp.pl	<i>Patrycja Fornal</i>
4	LINGA JAJKOWSKA	MUSE	lingajajkowska@gmail.com	<i>Linga Jajkowska</i>
5	TOMASZ KORDAS	Potencjalny Przedsiębiorca	tkordas@damar-computres.pl	<i>Tomasz Kordas</i>
6	DANIEL LYCIUK	Potencjalny Przedsiębiorca	dlyciuk@damar-computres.pl	<i>Daniel Lyciuk</i>
7	ANNA PIORUN	Potencjalny Przedsiębiorca	piorunanna@gmail.com	<i>Anna Piorun</i>
8	Hedvigste Lykto	Freelancer-trainer & coach	mayala@gmail.com	<i>Hedvigste Lykto</i>
9	Eloisee Scarpit	Egypt	elisee.scarpit@gmail.com	<i>E. Scarpit</i>
10	Ameska Mibz	Egypt	ameska@andem	<i>Mibz</i>
11	Amiecha Lykto	Egypt	amiecha@andem	<i>Lykto</i>
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**SEMINAR CU FOCUS GROUP SI STAKEHOLDERS**

**IN DATA DE 29.01.2016 ORA 10.00**

NR CTR	NUME SI PRENUME	Scoala/Universitate/Firma	Adresa de e-mail	Semnatura
1	EMILIAES NICOLETA	COLEGIUL ECONOMIC A.P.D.A	nicolatese yulius.com	cp
2	BORNA EMMA PATRICIA	UNIVERSITATEA "GHEZEL VLAHICU" ARAD	emma-palbrunescu @yahoo.com	
3	VASILE BIANCA	UNIVERSITATEA "MAREL VLAHICU" ACRIS	vasile-bianca@yahoocou.com	



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NR CTR	NUME SI PRENUME	Scoala/Universitate/Firma	Adresa de e-mail	Semnatura
4	GORNIC NATALIA ASATHIA	UNIVERSITATEA MARE VIEZI ARAD	ogadka.gornic @yale.com	<i>[Signature]</i>
5	CUSTA MARISSA GABRIELA	UNIVERSITATEA A HUNEL VEHEU * PASAU	gabriel.custa@yale.com	<i>[Signature]</i>
6	BĂBIEȘ ȘIMONA ȘIMONELA	UNIVERSITATEA "P. PONI" VAHREȘI ARAD	ovet.babiescu@yale.com	<i>[Signature]</i>
7	VAHREȘI ȘIMONA CAMELIA	COLEGIUL ECONOMIC ARAD	robert11@yale.com	<i>[Signature]</i>
8	KOVACS ZOLANA	COLEGIUL ECONOMIC ARAD	zoli.kovacs@yale.com	<i>[Signature]</i>
9	TUCULEAN VIVIAN ADRIAN	COLEGIUL ECONOMIC ARAD	vivian.tuculean@yale.com	<i>[Signature]</i>
10	BISERICA ALEXANDRU ARAD	COLEGIUL ECONOMIC ARAD	alexander@yale.com	<i>[Signature]</i>
11	IBRAHIM PATRIK	HEGGS - ENBIRTI APEC - CREVEPS	ibrahim.patrick@yale.com	<i>[Signature]</i>



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HR OVR	NUMSTERNAAM	SCHEIDINGSRECHTS UNIVERSITEIT	HOOGESCHOOL	STAD	STAD
2	GOLDING MARIEZ NEAMVLSKI	UNIVERSITY OF AKEL VILAKU ARVA	BOONSAAPMANNEL 91911001		Boon Saapman
3	RAMA ROCHMA GODDANA	UNIVERSITEN UNIVERSITEN	RAMA ROCHMA UNIVERSITEN		Rama Rochma
4	BUN KOELIN ANAPRI	UNIVERSITAT UNIVERSITAT	UNIVERSITAT UNIVERSITAT		Bun Koelin
5	BOERIV PAUL CEZAR	UNIVERSITAT UNIVERSITAT	UNIVERSITAT UNIVERSITAT		Boeriv Paul
6	BANIBAN CASHIR UNUN	UNIVERSITAT UNIVERSITAT	UNIVERSITAT UNIVERSITAT		Baniban Cashir
7	BAU ZEAM BOGDAN REYAVIDIA	UNIVERSITAT UNIVERSITAT	UNIVERSITAT UNIVERSITAT		Bau Zeam
18	TODEBU DUAN	CITE DE CITE DE	TODEBU DUAN		Todebu Duan
19	BOHZA VASILE	1 S. J 1 S. J	BOHZA VASILE		Bohza Vasile



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## EntrInno – Attendance list

Focus Group - 27.01.2016

Leecroft House, 58-64 Campo Lane, Sheffield, S1 2EG, United Kingdom

Inova Consultancy Ltd.

Name	Organisation (if applicable)	Email	Signature
1 RYAN LEBROULT		ryanholt1@sheffield.ac.uk	
2 JACK DENARD		denardj@sheffield.ac.uk	
3 OLANE BOUNAN		olanan1@sheffield.ac.uk	
4 EVALDINA DUCOPE		evarte-olh@mail.com	
5 CLARE SYMONDS		clare.symonds@aol.com	
6 Emma Pearson		emba.pearson@gmail.com	
7 David Eagle		oline.eagle@gmail.com	
8 Louise Balderson		louise.siz@hotmail.co.uk	
9 Emily Brough		emilybrough@hotmail.co.uk	
10 Andra Idam		andra.idam@gmail.com	
11 Marina Lemos		marinos@inovaconsult.com	
12 Elsa DeFoy		office@inovaconsult.com	
13 TRAVIS TUSKE		Support@inovaconsult.com	
14 Roxana Watterman		inovaconsult@gmail.com	
15 John Kowale		J.Kowale@sheffield.ac.uk	
16 Anthony Okechukwu		guynechukwu@hotmail.com	
17 CHILES CARWRIGHT		chiles.carwright@hotmail.com	





## EntrINNO – Attendance list

Focus Group

12<sup>th</sup> February 2016, MCAST, Paola (Malta)

Kopin

	Name	Organisation (if applicable)	Email	Signature
1	WILLIAM GRECH	Kopin	william.grech@kopin.org	
2	Albert Debono	SMYIT	albert@youtkema.eu	
3	ROLAND MICHAEL ATTARD	MALTA COOPERATIVE FEDERATION	ROLAND@YES1MATTERS.GM	
4	Christian Curmi	Agenzija Zgħajrija	christian.a.curmi@gov.mt	
5	ERIC FLASK	MCAST	eric.flask@mcast.edu.mt	
6	CONRADO VASSALLO	MCAST	CONRADO.VASSALLO@MCAST.EDU.MT	
7	Roderick Agius	Kopin	roderickagius69@gmail.com	
8				
9				
10				
11				
12				
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14				
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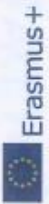


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No.	NAME and SURNAME	email	INSTITUTION	SIGNATURE
1.	Georgia Prastitan	prostita@gmail.com		
2.	Eliza Theofanous	eliza.theofanous@hotmail.com		
3.	Loizos Pitiillides	Loizos.P@btohal.com		
4.	Eleni Nicolaou	eleni.nicolaou@thuedesignspace	The DesignShop	
5.	Andreas Habisofocleas	andreas.hss@hotmail.com	Global shapers	
6.	Alexander Apostolides	alexapo.studies@gmail.com	EUC	
7.	Panicos Marinou	m-panicos9@hotmail.com		
8.	Yiannis Trimitiotis	y.trimitiotis@ec.ac.cy	EUC	
9.	George ISAIAS	isaias@synthesis-center.com	SYNTHESIS	
10.	JOANNA LEONTIOU	joanna.leontiou@gmail.com	PolyparMedical Ltd	
11.				
12.				
13.				
14.				
15.				





## EntrInno – Attendance list

Focus Group

Athens, 26 January 2016

KMOP

	Name	Organisation (if applicable)	Email	Signature
1	Vera Pratikati	-	vpratikatis@me.com	
2	Evangelos Angelopoulos	-	evangelos_angelopoulos@yahoo.gr	
3	Dimitris Heloni		demi.heloni@gmail.com	
4	Christine Gioufkiadi		gioufkiadi.christine@gmail.com	
5				
6				
7				
8				
9				
10				
11				



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## EntrInno – Attendance list

Focus Group

Athens, 25 January 2016

KMOP

	Name	Organisation (if applicable)	Email	Signature
1	Sotiris Pantazis	Headway Ltd.	headway@headway.gr	
2	P. Papadimitriou	University of Peloponnisos	Papad@uop.gr	
3	Grigoris Christidis		gchristidis@gmail.com	
4	Dimitris Nestoras	GAIA	info@kelgaia.gr	
5				
6				
7				
8				
9				
10				
11				



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